

DOCUMENT RESUME

ED 076 465

SO 005 634

TITLE Classification of Educational Systems in OECD Member Countries. France, Norway, Spain.
 INSTITUTION Organisation for Economic Cooperation and Development, Paris (France).
 PUB DATE 72
 NOTE 137p.
 AVAILABLE FROM Organisation for Economic Cooperation and Development, 2, rue Andre-Pascal, 75775 PARIS Cedex 16, France (\$3.75)
 EDRS PRICE MF-\$0.65 HC-\$6.58
 DESCRIPTORS Classification; Comparative Analysis; *Comparative Education; Education; Elementary Grades; *Foreign Countries; Higher Education; Schools; Secondary Grades; Statistical Data
 IDENTIFIERS *Educational Systems; France; Norway; Spain

ABSTRACT

The present volume is one of a series intended to provide a comparative view of the education systems of member countries of the Organisation for Economic Cooperation and Development (OECD). Published in response to a need for a conversation key so that national data could be readily converted on the basis of a standardized system, its purpose is to assist OECD member countries in the development of their educational statistics and to provide a basis for the collection of internationally comparable statistics. For background information on the method of classification, and for related documents, see SO 005 530. This volume deals with three member countries, France, Norway, and Spain. Provided are definitions of terms used in the OECD classification, which is by type of education and not by institution providing education. A short bibliography following each country gives sources of information regarding the educational institutions. (JMB)

ED 076465

CLASSIFICATION OF EDUCATIONAL SYSTEMS

France

Norway

Spain

50005634

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

FILMED FROM BEST AVAILABLE COPY

ED 076465

PERMISSION TO REPRODUCE THIS COPY
RIGHTED MATERIAL HAS BEEN GRANTED
BY

OECD

TO ERIC AND ORGANIZATIONS OPERATING
UNDER AGREEMENTS WITH THE U.S. OFFICE
OF EDUCATION. FURTHER REPRODUCTION
OUTSIDE THE ERIC SYSTEM REQUIRES PER
MISSION OF THE COPYRIGHT OWNER

**CLASSIFICATION
OF EDUCATIONAL SYSTEMS
IN OECD MEMBER COUNTRIES**

FRANCE
NORWAY
SPAIN

The Organisation for Economic Co-operation and Development (OECD) was set up under a Convention signed in Paris on 14th December, 1960, which provides that the OECD shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;*
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development;*
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.*

The Members of OECD are Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

© Organisation for Economic Co-operation and Development, 1972.

Queries concerning permissions or translation rights should be addressed to:

Director of Information, O.E.C.D.

2, rue André-Pascal, 75775 PARIS CEDEX 16, France.

INTRODUCTION

The present volume is one of a series intended to provide a comparative view of the education systems of all OECD Member countries. It is a complement to the earlier OECD "handbook" for educational planners: Methods and Statistical Needs for Educational Planning which was published in 1967; one of the conclusions of which was the need to establish a "conversion key for all OECD Member countries so that published national data can be readily converted on the basis of the standardized system" as proposed in the above publication*.

The purpose of both the "handbook" and this classification is to assist OECD Member countries in the development of their educational statistics and to provide a basis for the collection of internationally comparable statistics.

In fact, although education is first and foremost a national concern, the problems experienced in the development of educational systems are often similar in a number of countries. For this reason, it may be useful to compare different countries' solutions to specific problems. But for such comparisons to be valid, they must be based on common terms of reference; the statistics must, insofar as possible, have the same meaning in the various countries concerned.

For the statistics published by national authorities to be used as a basis for inter-country comparisons, a classification system and a set of definitions must be adopted which are acceptable and applicable to all the countries interested in making such comparisons.

Efforts have been made in various OECD studies to publish statistics on as comparable a basis as possible; no classification of education systems in their entirety has yet been established. The preparation of such a classification for OECD Member countries was included in the programme of the Committee for Scientific and Technical Personnel which has recently been replaced by the Education Committee.

* This publication was endorsed by the OECD Council "as a suitable framework for the compilation of comparable educational statistics".

The "handbook provides the basic analytical framework and rationale for the classification; the present study shows in detail how the different parts of each country's education system are related to the reference frame in the "handbook". It is intended to be a guide to anyone who wishes to compare or understand the structure of the education system in OECD Member countries.

To establish a conversion key for the different countries, we have to start with the national classification of each country; in principle, only those types of education or institutions which are explicitly treated in national statistics are included. The degree of detail in published statistics varies enormously from country to country, and this explains the divergence in the size of the entry for different countries in these volumes. Where appropriate, and when the information was available, other types of education have also been mentioned.

The next step was to compile maximum information on these different types of education so as to assess them qualitatively. The evaluation criteria included length of studies, admission requirements (i. e. previous schooling), qualifications conferred and the possibility of transfer to other types of education, organisation of studies on a full-time or on a part-time basis, and any other information of possible interest to potential readers.

On the basis of this information, each type of education or institution has been reclassified under the OECD system, both from the standpoint of standardized designation and in terms of its position on the educational ladder by year of study.

Since education is now being extensively reorganised in many countries, the present study attempts to present the existing situation but also to give an indication of changes which have occurred during the past ten years.

While the present classification is valid for the situation at the date mentioned for each country, it may no longer hold for the new educational structures and concepts towards which some countries are already moving: for example, the discontinuance of the notion of levels and grades, continuing or recurrent education, etc. These changes will be taken into account in future revisions of this classification.

Since educational statistics in most countries are still cast in a national mould which reflects traditional administrative needs, it is hoped that this conversion key may help to promote a better mutual understanding of the systems in the different countries, permit the compilation and presentation of comparable statistics and enable each country to identify easily what is covered by each aggregate presented in a particular study.

This classification was prepared for all OECD Member countries by the Directorate for Scientific Affairs of the OECD Secretariat on the basis of available information and was subsequently submitted to the appropriate national authorities for verification and approval. Responsibility for the work in the Secretariat was with Monique Solliliage of the Educational Investment and Development Division, assisted by Randolph Quenum, James Steel and Arne Isachsen.

DEFINITION OF TERMS USED IN THE OECD CLASSIFICATION*

This is a classification by type of education and not by institution providing education. In fact, pupils of the same institution may, depending on the section or options chosen, take a general or vocational course, a course preparing them for higher studies, or a terminal course. Only the different types of education are suitable for inter-country comparison. A case in point is that of the universities: as educational institutions they may provide, in addition to courses leading to the officially recognised first university degree, courses of shorter duration leading to qualifications below first-degree level and comparable to those awarded by higher education institutions not having university status. Conversely, non-university institutions may award the equivalent of a university degree.

Pre-primary

Non-compulsory education preceding entrance into primary education.

Primary

Compulsory general education for all pupils. In systems providing a comprehensive-type education for all pupils which covers all or part of their compulsory schooling, only those years in which there is no differentiation (in the form of subject options) have been regarded as primary education.

General secondary

Education which is not direct preparation for an occupation.

Technical secondary

Education designed as direct preparation for an occupation or trade.

* For further details of this classification, the reader is referred to Chapter IX of Methods and Statistical Needs for Educational Planning, OECD, 1967.

Secondary (a)

General or technical education offers pupils, upon completion, a relatively good chance of continuing their studies in a higher education establishment.

Secondary (b)

General or technical education, after which pupils have little chance of continuing to higher education.

This separation of secondary education into types (a) and (b) seems preferable to the frequently-used division into lower and upper levels or 1st and 2nd cycles because in more and more cases the lower level is common to all pupils (although sometimes composed of different sections) and only at the end of this period do pupils receive final guidance and make definitive choice concerning their future schooling.

Teacher training

Preparatory training for the teaching profession.

Non-university type higher education*

Higher education leading to a specific qualification, often occupational and, unlike the first university degree, generally not offering the possibility of pursuing doctorate or other post-graduate studies.

University type higher education*

The length of the different types of education varies from country to country. It was therefore considered advisable to specify the corresponding years of study in the educational scale so as to permit any regrouping necessary for inter-country comparisons.

* Where it has not been possible to make the distinction between non-university higher education and university higher education as defined here, the level of the degree awarded at the end of the different types of studies has been specified: below first-degree level, intermediate diploma (usually preparatory to first degree), first or basic degree, higher degree (above first degree), doctorate.

FRANCE

(August 1971)

Compulsory schooling: 10 years from the age of 6 to 16

FRANCE

10

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
1. <u>Pre-primary education</u> 1.1. Ecoles maternelles (Nursery school) 1.2. Classes enfantines (Infant classes)		-	-		For children aged between 2 and 6. State or private schools. Instruction of this kind is also given in infant classes attached to a primary school.	Pre-primary	
2. <u>Primary education</u> 2.1. Ecoles élémentaires (Elementary schools) 2.2. Classes primaires (Primary classes)	5	To be 6 years old (5 in some municipalities). Exceptions in favour of age are made.	-	Full time	Instruction is given in independent State and private schools as well as in primary classes of general secondary school and includes: preparatory course (CP), elementary courses (CE1 and CE2), intermediate courses (CM1 and CM2). These classes followed the period of elementary education until age of 14 which was formerly school leaving age. The primary certificate was awarded at the end of the course (CEP), enabling pupils to sit a competitive entrance examination to the 1st year in a technical college (CEI) or to be admitted to an agricultural college on the strength of a school record. The extension of the period of compulsory education to 16 and the creation of a 1st cycle of secondary education in the new CES and CEG have brought about the progressive disappearance of the classes. In fact, now all pupils must automatically enrol in the 1st cycle of secondary education after the elementary period. As these classes have not yet entirely disappeared pupils who still attend them can pursue their studies in the CET, after sitting a competitive examination, with a view to learning a trade and in agricultural colleges of CET level in rural areas (entrance is on examination of school record) or in the transition	Primary	1-5
2.3. Classe de fin d'études primaires (Primary terminal classes)	2					General secondary (b)	6-8

FRANCE

11

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
3. <u>Special education</u>	Variable	Variable according to level of studies	Variable according to level of studies	Full time	classes of CES and CEG or enter an industrial or commercial apprenticeship so as to acquire professional training while continuing part-time schooling. This type of education covers training classes for the handicapped, national schools of further training, special classes or schools for children with sensorial or motor defects, outdoor schools for children from hospital observation units or who are convalescing. Instruction is generally given in independent institutions.	Special	Variable
4. 1st cycle of general secondary education	4	Completion of elementary education	Optional - 1st cycle certificate (BEP) allowing pupils to sit a number of competitive examinations in administration, as well as competitive entrance exam in certain specialized schools. Compulsory education leaving certificate for pupils who leave school on completion of compulsory education.	Full time	In state establishments the 1st cycle of secondary education or observation and guidance cycle is provided in: - General secondary schools (lycées): these establishments provide both 1st and 2nd cycles, but 1st cycle instruction is gradually being phased out; - in colleges of general education (CEG) which provide only 1st cycle. These establishments will also disappear or be transformed into CES; - in colleges of secondary education (CES) which are of recent creation and cover all types of instruction mentioned below within one single establishment. They will become entirely 1st cycle establishments. After elementary studies all pupils enter 1st secondary cycle which covers 6th, 5th, 4th and 3rd forms. (The French forms in secondary school are numbered inversely compared to English system i.e. French 6th form = English 1st form, etc.)		6-9
4.1. Lycées (General secondary schools) (1st cycle)	4						
4.2. Collèges d'enseignement général - CEG (Colleges of general education - CEG)	4						
4.3. Collèges d'enseignement secondaire - CES (Colleges of secondary education - CES)	4						
4.4. Etablissements secondaires privés du niveau du lycée (Private secondary establishments of 2nd cycle secondary level)	4						

FRANCE

12

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
4.5. Cours complémentaires privés (Complementary private courses)	4				Pupils are streamed towards the following types of courses depending on their ability: I: "lycées" type and II: CEG type which have a common syllabus but differ in teaching methods or III: former transition section with syllabus and teaching methods suited to type of course provided. Courses in III are designed for pupils who, on completion of CM2 class general cannot be admitted to a secondary 6th form, nor a CEG 6th form. For pupils who are unable to join either section I or II courses are extended by practical instruction including a pre-vocational training. The first two years of study (6th and 5th) are common to all pupils. From 4th form onwards pupils can choose various optional subjects in addition to the common core of subjects. As far as possible an attempt is made to standardize the choice of optional subjects throughout the various establishments. There nevertheless remains an essential difference between establishments type I, II and III due to the qualifications of the teaching staff. The 2nd cycle of secondary education includes: a long general or technical education, a short education and courses in agriculture.	Type I and II: General secondary (a) Type III: General secondary (b)	
5. 2nd cycle of Secondary education							

FRANCE

13

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
5.1. Enseignement général ou technique long (General or technical education - 2nd cycle long courses) - Lycées et établissements secondaires et techniques privés de même niveau (General secondary schools and equivalent private secondary and technical institutions)	3	On advice of guidance council at the end of 3rd form. If advice is not accepted by pupil he must sit an entrance exam to section of his choice and should he fail, must follow advice given by guidance council. Transition from one class to another is made on the decision of the class council who can direct pupil towards a different section. There is, therefore, continual guidance, but section chosen in 2nd form largely determines future course of studies.	"Baccalauréat" with mention of special section. In theory, all "baccalauréats" give access to any university or other institution of higher education. However, type of studies undertaken in 2nd cycle and "baccalauréat" obtained prepare pupils more particularly for entrance to certain faculties. "Baccalauréat" A (philosophy, arts): Faculties of Arts and Law "Baccalauréat" B (economic and social sciences): Faculty of Arts (human science) and law (economics) "Baccalauréat" C (mathematics and physics): Faculties of Science (degree in Mathematics and Physics) and top level Engineering schools "Baccalauréat" D (mathematics and natural sciences): Faculties of Science (natural science) and Faculties of Medicine and Pharmacy and to some top level schools (agronomy and veterinary medicine)	Full time	This type of education includes three sections at 5th year level (classe de seconde) 2nd A: Arts - with three options A.B. and possibility of sitting the technical leaving certificates. 2nd C: Science 2nd T: Technical with possibility of sitting the technical leaving certificate - and five sections at 6th year level (classe de première) 1st A: Arts 1st B: Economic and Social Sciences 1st C: Mathematics and Physics 1st D: Applied Science 1st E: Scientific and Industrial Techniques of general character. In 5th year as in 6th year sections include a group of common subjects and a choice of options which determine kind of "baccalauréat" obtained. In 7th year (classe terminales) there is more intensified specialization depending on different fields of study pupil intends to pursue in higher education. These include: Terminal A: Philosophy, Arts with Latin with a choice of three options and a 2nd modern language with a choice of two options.	General secondary (a)	10-12

FRANCE

14

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification Type of Education (7) Years of Study (8)
5.1.2. Préparation aux baccalauréats et brevet de technicien (B.Tn et BT) (Preparatory courses for technician's "baccalauréat" and certificate - B.Tn and BT)	3	Completion of 1st secondary cycle	"Baccalauréat" E (mathematics and techniques); Engineering schools (trade and craft schools and national schools of engineering) and Faculties of Science. All these types of "baccalauréat" also give access to IUT's. Technician's "baccalauréat" in economy; Technician's "baccalauréat" in industry; Technician's "baccalauréat" in computing These three types are particularly geared towards IUT. Technician's certificate:	Full time	In addition to this there are other optional subjects. Terminal B: Social and Economic Sciences (two options). Terminal C: Former elementary Mathematics leads towards study of Mathematics and Physics (four options). Terminal D: Mathematics and Natural Science (four options). Terminal E: Mathematics and Techniques. An average mark of 10 is required in order to obtain the "baccalauréats". A secondary leaving certificate is, however, also awarded to those who have scored a mark between 8 and 10 in the examination In addition to the long technical education terminating with "Baccalauréat" E, there are also other types of education of the same duration covering industrial techniques or commerce and administration and which lead to the technician's "baccalauréat". Pupils studying for the technician's "baccalauréat" in economy attend a second AB (introduction to economics) followed by a 6th year (classe de 1ère) and a final year G (three options) whereas pupils from 5th year T can attend the 6th year followed by a final year F (eight options) in order to prepare a technician's "baccalauréat" in industry or attend the 6th year followed by a final year H leading to a technician's "baccalauréat" in computing. On the advice of the guidance council, pupils can attend special classes in general secondary schools, if they so desire.	Technical secondary (a) 10-12 Technical secondary (b) 10-12

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
5.2. Enseignement professionnel court (Vocational training - short course)	2	Completion of 1st secondary cycle	- hotel management and catering - social welfare and allied medical professions - industry		1) Hotel Management TH: two options: A: cooking, restaurants. B: reception, administrative work, room service. Study of English is compulsory. 2) Social Technical section TSO (two options: medical-social office studies and assistant in community management department) includes study of one modern language, natural science and hygiene, accountancy, professional legislation depending on slant of speciality. 3) Industrial section TI - including study of French, a modern language, mathematics and physics, technical technology, etc., depending on specialized field of study. There are also 2-year courses leading to the (BEI) certificate of industrial education. At the level of the final year there are various sections giving access to either the advanced technicians section or to industrial and commercial specialist fields which are without the regular training offered.	Technical secondary (b)	10-11
5.2.1. Préparation au brevet d'études professionnelles (BEP) (Instruction leading to BEP - certificate of vocational studies)	2	Completion of 1st secondary cycle	Vocational certificate (BEP) of industrial and tertiary sector or CAP (vocational proficiency certificate - 2 years) in special subjects where there is no BEP at present.	Full time	Training of employees qualified for a set of activities related to one particular professional sector. The level of general and technical knowledge reached through this training favours adaptability to changes in technology and also allows gifted pupils to have access to the technical sections of the long second cycle (6th year technical - special course).	Technical secondary (b)	10-11

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
- Collèges d'enseignement technique (CET) et certaines sections professionnelles des lycées (Colleges of technical education - CET and some vocational sections of general secondary schools - lycées)							
5.2.2. Préparation au certificat d'aptitude professionnelle (CAP) (Instruction leading to certificate of vocational proficiency - CAP)	3	After primary terminal classes where they exist, or practical classes of 4th form, pre-vocational classes and, in some cases, transition classes of 5th form	Certificate of vocational proficiency (3rd year CAP) in social, industrial and economic sectors	Full time	A more specialized training than for BEP leading to a specific trade (turner, miller). By attending courses of professional and social promotion, holders of the CAP can prepare the vocational certificate (BP).	Technical secondary (b)	9-11
- CET et sections professionnelles de lycées. CES et CEG (CET and vocational section of "lycées", "CES" and "CEG")							
5.2.3. Préparation au certificat d'éducation professionnelle (CEP) (Instruction leading to certificate of vocational education - CEP)							
- Classe pré-professionnelle (Pre-vocational class)	1	Completion of terminal primary classes or terminal practical classes	Gives access to CEP or CAP classes	Full time	Training leads to skilled workman's occupation and is essentially for young people who cannot continue their studies and who have not had any vocational training, or for those who, although still of compulsory school age (i.e. under 16 years of age) are not enrolled in any other school institution.	Technical secondary (b)	9
- Classes de CEP (CEP classes)	1	Completion of pre-vocational classes or practical classes of 3rd form	Certificate of vocational education		However, those sections which lead to a CEP are available only when there are openings in the sector and in the area in question: here it is a matter of training suited to posts available.		10

FRANCE

17

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
5.2.4. Préparation au brevet professionnel (BP) - Cours de perfectionnement (Course in further training leading to vocational certificate)	2	To hold a BEP or a CAP	Vocational certificate	Part time	This instruction existing only in certain specialized subjects is given in conjunction with the exercising of an occupation.	Technical secondary (b)	12-13
5.3. Enseignement agricole (Agricultural education)					Includes a short and long type of education.		
5.3.1. Enseignement court (Short education) - Collèges d'enseignement agricole (Agricultural colleges) - Centres de formation professionnelle agricole (Vocational agricultural training centres)	Variable	Depending on training, candidates are required either to have completed primary terminal classes, where they exist or to have reached 4th form level, or have completed secondary 1st cycle	Post-school certificate in agriculture or rural domestic economy. Agricultural apprentice's certificate (BAA); Vocational certificate of agriculture (BEPA); Certificate of agricultural education (BEA).	Full time	Short education course in agriculture is given in colleges of agriculture and centers of vocational training in agriculture which provide several types of training. The length of the course and diploma awarded are different in each case. After the reform of the short education course in agriculture, only the BAA and BEPA will remain.	Technical secondary (b)	
5.3.2. Enseignement long (Long education) - Lycées agricoles (Secondary schools of agriculture (lycées))	3 or 5	5th form level but also end of 1st cycle	Certificate of agricultural technician (BTA) general or with mention of the option or "baccalauréat" D' (Agronomy and Technical Science)	Full time	Long education course begins in 4th form but those from 3rd form in general secondary schools and colleges can go into 2nd year. Choice of options is as follows: horticulture, dairying, viticulture, oenology, forestry, economic management. Holders of the BTA can prepare the agricultural technician's higher certificate (BTSA) in 2 years, the competitive entrance examinations to certain higher agricultural institutes and be admitted to the Faculty of Science. They can have access to certain posts in administration and in related sectors.	Technical secondary (a)	8-12 or 10-12

FRANCE

18

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
5.3.3. Centres de promotion agricole (Centers of agricultural promotion)	Variable	To be 18 and be of 3rd form level	Vocational certificate in agriculture		Holders of series D "baccalauréat" can, like holders of "baccalauréats" of other series, continue their studies in higher education (universities, "grandes écoles", etc.). This instruction gives preparation for careers as instructors in agricultural education, advisors in dissemination of agricultural methods.	Technical secondary (b)	
6. Apprenticeship	3	Completion of compulsory education	CAP (certificate of vocational proficiency)	Part time	Apprenticeship training requires a contract. In addition to training within a firm, apprentices must attend part-time post-school classes. These post-school courses are of different types: comprehensive courses covering various types of apprenticeships, vocational courses, correspondence courses. Certain firms assure both the practical and theoretical training of their apprentices.	Technical secondary (b)	
7. Other types of vocational education							
7.1. Centres de formation professionnelle des adultes (Centers of vocational training for adults)							
7.1.1. Formation I (Training I)	6-9 months	At least 17 years old	Various certificates	Full time	These centers are dependent on the Ministry of Labour and Social Affairs. Young men and women may be admitted to these centers which, through paid training courses of 6-9 months, prepare them for jobs such as adjusters, fitters, refrigeration repairs, assistant accountants, shorthand typists, etc.	Complementary	

FRANCE

19

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
7.1.2. Formation II (Training II)	9-14 months	To be 21, have completed military service and have passed exam or competitive examination of school 1st cycle leaving certificate level (BEPC) (lower secondary certificate) or "O" level	Qualifications of technician's level	Full time	Young men and women may acquire technician's training: construction draughtsman, plastics technician, secretary with shorthand and typing after 9-14 months paid training course.	Complementary	
7.2. Cours de "promotion sociale" (Course for "social promotion")	Variable	To exercise a professional activity	Certificate of vocational proficiency (CAP) and vocational certificate (Brevet professionnel BP)	Part time	Courses are organised by public bodies (municipalities) or private bodies (professional associations). Courses are for young men and women who have left school without any vocational training.	Complementary	
8. Teacher training	5 or 2	Competitive entrance examination after 3rd form or competitive entrance examination to 3rd year for holders of "baccalauréat"	Teacher training certificate (CFEN) then CAP (certificate of teaching proficiency)	Full time	These courses include: 1) Preparation for "baccalauréat" in 2-3 years depending on whether candidate begins in 2nd or 1st year; 2) A professional training proper of 2 years open to above-mentioned candidates after pass in "baccalauréat" and to holders of "baccalauréat" who have passed the competitive entrance exam to 3rd year. Course ends with award of CFEN. However, in order to become certificated, probationary primary teachers must sit the practical examination of the CAP (certificate of teaching proficiency). Certificateds awarded entitle students to teach in primary education. A certain number of primary teachers can prepare in these schools the CAP-EGC (see 8.2.2.), enabling them to teach in section II of the CES and in the CEG.	General secondary (a) Higher non-university (education)	10-14 or 13-14

FRANCE

20

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
8.2. Centres régionaux (Regional centers)							
8.2.1. Préparation à l'enseignement dans les sections III et pratiques des CEG et CES (Preparation for teaching in sections III and practical classes of CEG and CES)	2	"Baccalauréat"	Certificate of teaching proficiency in sections III and practical classes of CEG and CES	Full time	This course is also open to certificated primary teachers with five years experience of teaching either as qualified teachers or probationary teachers. As a temporary measure, the 1st year of training is done by correspondence and ends with an examination giving access to a center where a 1-year probationary training course is undergone sanctioned by a CAP.	Higher non-university (education)	13-14
8.2.2. Formation des professeurs de CEG et des sections II de CES (Training of teachers of CEG or 1st cycle secondary education - and section II of CES)	3-4	"Baccalauréat"	Teacher training certificate adapted to short cycle, followed by CAP-EGC (former CAP-CEG)	Full time	This training lasts three years after the "baccalauréat" and requires completion of a further year of studies before title of certificated teacher is conferred. These centers also train schoolmistresses who intend to take up teaching of domestic science or agricultural domestic studies.	Higher non-university (education)	13-15/16
8.3. Instituts de préparation à l'enseignement secondaire (IPES) (Institutes for preparation of secondary education - IPES)	2	Before 1966: university preparatory year, after 1966: first year of the 1st cycle of arts and science faculties and pass in IPES competitive entrance exam.	Teaching degree (licence d'enseignement) or post-graduate diploma (maîtrise)	Full time	These institutes exist within the faculties of arts and science and do not provide any teacher training as such. Their aim is to offer favourable working conditions for students preparing their 1st or post-graduate diploma who intend to enter the teaching profession. The first degree course generally lasts two years but may be reduced to one for holders of one or more certificates of higher studies but who do not hold the complete teaching degree. Students can sit the oral examinations of the theoretical CAPES (secondary teachers certificate) either directly after the 1st degree or after a further year in the IPES. In the latter case they usually also study for a post-graduate diploma or a 3rd cycle degree. The "ipésiens" are exempted from the written part of the theoretical CAPES examination.	Higher university	

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
8.4. Centres pédagogiques régionaux (CPR) (Regional teacher training centres - CPR)	1	Holder of a teaching degree (licence) or post-graduate diploma (maîtrise) and have passed the theoretical part of CAPES	Secondary teachers' certificate (CAPES)	Full time	Candidates who have passed the theoretical part of the CAPES (written and oral examinations for "non-ipésiens" graduates, oral examinations only for "ipésiens") undergo a 1-year professional training course under the supervision of pedagogical advisors in a CPR. On completion of the course they sit the practical part of the CAPES, qualifying them as secondary teachers (section I of 1st cycle and 2nd cycle).	Higher university	
8.5. Ecoles normales supérieures (Ulm, Sévres, St. Cloud, Fontenay) (Higher teacher training colleges)	3-4	"Baccalauréat" and two years of preparation; competitive entrance examination	CAPES and agrégation (highest teaching qualification)	Full time	The great majority of "normaliens" of Ulm and Sévres enter posts in higher education or research while those in St. Cloud and Fontenay tend towards careers in secondary education.	Higher university	
8.6. Ecole normale supérieure de l'enseignement technique de Cachan (ENSET) (Higher technical teacher training college of Cachan - ENSET)	3-4	"Baccalauréat" and two years preparation; competitive entrance examination	Certificate of teaching proficiency in secondary technical education (CAPET)	Full time	These colleges train teachers of general subjects and theoretical techniques. Before becoming a qualified assistant technical teacher, candidates must complete a 1-year training course in a center affiliated to the ENSET.	Higher university	
8.7. Centre de formation de Dijon (Training center of Dijon)	1	Teaching degree (licence) or diploma in engineering or general agronomy	Certificate of teaching proficiency in agricultural secondary schools (lycées)	Full time	Proficiency certificate for teaching in "lycées" of agriculture is equivalent to the CAPES and the CAPET.	Higher university	
8.8. Ecole normale nationale d'apprentissage (ENNA) (National teacher training apprenticeship center - ENNA)	2	Admission by competitive entrance exam. Conditions of enrolment to course vary with post-applied for	Proficiency certificate for teaching in CET	Full time	The college gives pedagogical training to three categories of trainees, depending on whether they are aiming to become teachers of general education, teachers of theoretical techniques or assistant technical teachers. Entry conditions vary with each category.	Higher university	

FRANCE

22

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
8.9. Centre national de préparation au professorat de travaux manuels (National center for training of teachers of handwork)	3	"Baccalauréat" and preparatory certificate	Certificate in domestic educational subjects and domestic science	Full time	After obtaining the certificate students are required to complete a teacher's training course leading to the teaching proficiency certificate for general secondary schools and primary teacher training colleges.	Higher university	
8.10. Ecoles d'éducateurs spécialisés (CREAI) - Ecole de formation d'éducateurs spécialisés et institut d'études médico-pédagogiques de l'adaptation de l'adaptation (Specialized educationalists - CREAI: Training college for specialized educationalists and institute for medico-pedagogical studies of maladjusted children)	3	Examination	Specialized educationalist State diploma	Full time	Training is provided in recognized schools and in university institutes. Students have a choice of three options: mental deficiencies, behavioral disorders or physical deficiencies. The courses also include training periods.	Higher university	
8.11. Instituts de formation de conseiller d'orientation scolaire et professionnelle (Training institutes for school and vocational guidance counsellors)	2 1	"Baccalauréat" Psychology degree	State diploma for school and vocational guidance counsellors	Full time	Entrance to these institutions is finalised only after candidates have passed an aptitude examination. In order to work in public services, graduates are required to pass a competitive recruitment examination.	Higher university	

FRANCE

23

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
8.12. Centres pédagogiques régionaux (pour professeurs des disciplines artistiques et spéciales) (Regional pedagogic centers - for teachers of artistic and special subjects)	1	Teacher's certificate corresponding to subject proposed to teach	Title of certificated teacher	Full time	These centers give, in particular, pedagogical training.	Higher university	
8.13. Education physique (Physical education)							
8.13.1. Centres régionaux d'éducation physique et sportive (CREPS) ou Instituts régionaux d'éducation physique et sportive (Regional centres of physical education and sport - CREPS - or regional institutes of physical education and sport)	1	"Baccalauréat" and entry competition		Full time	Training includes a 1st year in a CREPS or a regional institute and three years in ENSEPS. In order to become a teacher of physical education and sport in 2nd cycle secondary schools, candidates are required to have a complete training in sport and physical education.	Higher university	
8.13.2. Ecole normale supérieure d'éducation physique et sportive (Higher training institutes of physical education and sport - ENSEPS)	3		Proficiency certificate for teachers of physical education and sport	Full time		Higher university	
8.13.3. Institut national des sports (INS) (National institute of sport)	2	BEPC	Title of qualified teachers of physical education and sport	Full time	For men, the 1st year of training takes place in the CREPS of Houlgate and the 2nd year in INS. For women, the two years of training are spent in Chatel-Guyon.	Technical secondary (b)	10-11

FRANCE

24

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
University type education or equivalent 9. Universités (Universities)					There are state universities and private universities known as "facultés libres" (mostly Catholic faculties). The latter constitute but a small part of the system of university education. The universities which include a large number of specialized institutes were divided into faculties before 1968 Reform. There are, in general, five specialized faculties, the faculties of Medicine and Pharmacy often forming one mixed faculty. It must also be noted that there are training centres of university level for major public services. These centres provide training, in the main, for top level civil servants. Since 1968 the "units" of education and research (UER) created by the "loi d'orientation" in higher education have replaced the traditional faculties, and cover all university activities. Thirteen universities have been created in the Paris region, each one comprising UER's with a common aim and interest.		
A) System before the "loi d'orientation" (1968 reform law) 1. Faculté des sciences (Faculty of science) 1.1. Propédeutique (Preparatory year)	1	"Baccalauréat" (preferably elementary mathematics type) or special examination for students without "baccalauréat"	MGP = general maths and physics MPC = mathematics, physics and chemistry SPCN = physical, chemical and natural sciences		The 1st year of studies known as the "preparatory year" leading to the degree (licence). One of the four certificates which appear opposite is awarded at the end of this year.	Higher university	

FRANCE

25

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
1.2. Enseignement menant à la licence (Studies leading to a 1st degree - licence)	3	Preparatory (MGP, MPC, SPEN, PCB)	PCB = physics, chemistry, biology 1st degree (licence)		First degrees are conferred on students who hold five certificates of higher studies (CES) in addition to preparatory year. Each CES corresponds to a specific syllabus of subjects. There are two categories of 1st degrees: There are the teaching degrees for which there is a set choice of certificates. There are general degrees which may include more than five certificates (CES) of the candidate's own choice.	1st degree	
1.3. Enseignement au-delà de la licence (Post-graduate studies)							
1.3.1. Diplôme d'études supérieures (Diploma of higher studies)		1st degree	DES (diploma of higher studies)		This course follows the 1st degree course and must be completed by students wishing to prepare the "agrégation" or the State doctorate. There are three categories of DES: mathematics, physical and natural sciences.	Post-graduate	
1.3.2. Doctorat d'université (University doctorate)		1st degree	University doctorate		This is a short specialization cycle, including publication and defence of a memoir.	Post-graduate	
1.3.3. Diplôme de docteur-ingénieur (Doctorate in engineering)	2	Engineering diploma and three CES	Diploma of doctor of engineering		This includes the publishing and defence of two theses on applied sciences.	Post-graduate	
1.3.4. Doctorat de 3ème cycle (3rd cycle doctorate)	2 or more	1st degree	3rd cycle doctorate		This is a research cycle, and candidates are required to present a thesis.	Post-graduate	

FRANCE

26

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
1.3.5. Doctorat d'Etat (State doctorate)	Undetermined	DES	State doctorate		This is the highest academic award and preparation for it takes several years and includes the preparation and defence of two theses: one main thesis on a subject approved by the faculty board and a complementary thesis which is a short memoir on a theme proposed by the faculty.	Post-graduate	
1.3.6. "Agrégation"	Undetermined	DES (diploma of higher studies)	"Agrégé de l'université"		This is a high level competitive examination which was originally designed for the recruitment of secondary teachers. It is becoming more and more common now, however for holders of the "agrégation" to enter other fields of education (higher education research, etc.).	-	
2. Faculté des lettres (Arts faculty)						Higher university	
2.1. Propédeutique (Preparatory year)	1	All types of "baccalauréat" or special examination for students without "baccalauréat"	CELG = Certificate of general literary studies		The 1st year of the course is known as the "preparatory year". Candidates can choose either the classics or modern section		
2.2. Enseignement menant à la licence (Courses leading to the 1st degree)	2	CELG	1st degree		The 1st degree is conferred on holders of four certificates of higher studies (CES) including an oral examination in a modern foreign language. The following types of degrees may be distinguished: teaching degrees; general degrees (made up of four CES of candidate's own choice) and four other types of degrees composed of compulsory CES.	1st degree	
2.3. Enseignement au-delà de la licence (Post-graduate courses)							

FRANCE

27

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
2.3.1. Diplôme d'études supérieures (Diploma of higher studies)		1st degree	DES		These degrees are the same as science degrees and exist in the following subjects: philosophy, classics, modern languages and foreign literature, history, geography, modern arts subjects, art and archaeology.	Post-graduate	
2.3.2. Doctorat d'université (University doctorate)			University doctorate		Same as science faculty	Post-graduate	
2.3.3. Doctorat du 3ème cycle (3rd cycle doctorate)	2	1st degree	3rd cycle doctorate		This doctorate may constitute the 1st step towards a State doctorate with the possibility of the 3rd cycle thesis being accepted as the complementary thesis of the State doctorate. Graduates may enrol in this cycle and prepare a thesis within two years.	Post-graduate	
2.3.4. Doctorat d'État (State doctorate)	Undetermined	1st degree	State doctorate		These doctorates have same characteristics as doctorates in science faculty. It requires the defence of two theses and it is quite common for preparation of State doctorate to take as long as 10 years. See faculty of science (1.3.6.)	Post-graduate	
2.3.5. "Agrégation"	Undetermined	DES	"Agrégé d'université"			-	
3. Faculté de droit et sciences économiques (Faculty of Law and Economics)							
3.1. Enseignement menant au diplôme de capacité (Courses leading to certificate of proficiency)	2	No certificate	"Capacité" (proficiency certificate) in law		This is a special cycle for students without "baccalauréat". The course includes theoretical instruction plus practical classes. Examinations are held at the end of each year and candidates must pass these before going on to the following year.	Higher non-university	

FRANCE

28

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
3.2. Enseignement menant à la licence (Course leading to a 1st degree)	4	All types of "baccalauréat" or special examination for non-baccalaureate holders	1st degree showing section attended		The course leading to a 1st degree in law and economics has been the object of successive reforms over the period 1954-1960. The outcome of these reforms in 1960 was the distinction made between the law course and the economics course and the extension of both courses by one year. In 1st year there is a common course of subjects of particular interest to intending jurists and intending economists. In the 2nd year and 3rd year, students begin to pursue more specialized subjects, according to the type of degree in view. The 4th year of studies is devoted to three basic subjects. The course includes theoretical instruction which takes the form of lectures and compulsory practical classes. In addition to this, students in economics are required to attend a weekly session of practical classes in mathematics and statistics. Examinations are annual and are held over two sessions.	Higher university 1st degree	
3.3. Enseignement au-delà de la licence (Post-graduate courses)							
3.3.1. Diplôme d'études supérieures (DES) (Diploma of higher studies)	1	1st degree	Diploma of higher studies (DES)		The DES course takes place after the 1st degree (licence). There are six types.	Post-graduate	
3.3.2. Doctorat d'Etat (State doctorate)	1	DES	State doctorate in law		The decree drawn up on 15th June, 1959 includes the following six subjects: - history of law and social history - private law - criminology - common law - political science - economic science	Post-graduate	

FRANCE

29

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
3.3.3. "Agrégation"	Variable	State doctorate	"Agrégé" in law and economic science		The doctorate consists of the defence of a thesis. The subject chosen by the candidate must be recognised by the professor who supervises the thesis and approved of by the dean. Holders of a State doctorate can prepare the competitive examination of the "agrégation". This competitive examination, held every two years according to specialist subject, demands several years of preparation and entitles successful candidates to teach in the faculties of law and economics. The standard of the doctoral thesis is taken into consideration when candidates enrol for the competitive examination.	-	
4. Facultés de médecine et de pharmacie (Faculties of Medicine and Pharmacy)							
4.1. Médecine (Medicine)							
4.1.1. Année préparatoire (Preparatory year)	1	"Baccalauréat" (preferably sciences type) or special entrance examination for students without "baccalauréat"	Preparatory medical certificate (CPEM)		The CPEM is awarded at the end of the year. Courses are held in the Faculty of Science.	Higher university	
4.1.2. Enseignement menant au doctorat d'Etat en médecine (Course leading to State doctorate in medicine)	6	CPEM	State doctorate in medicine		The course includes: theoretical instruction (courses and lectures held in faculty), practical instruction (practical work carried out in laboratories), supervised instruction and clinical work done in hospitals. From 1st year in medicine students complete a certain number of compulsory periods of training in the hospital units of a university hospital centre (CHU). In the 5th year students participate in the consulting and examination of patients and complete a minimum six months period of	1st degree	

FRANCE

30

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
4.1.3. "Agrégation"	Variable	State doctorate	"Agrégé" of faculty of medicine and pharmacy		Successful "agrégation" candidates may teach in the faculties of medicine and pharmacy (see also 3.3.3.).	-	
4.2. Pharmacie (Pharmacy)						Higher university	
- 1st cycle	1	"Baccalauréat" or special exam for students without "baccalauréat"			This is a preparatory cycle.		
- 2nd cycle	4		Pharmacist		This cycle covers three years of general training and one year of specialization. The course includes theoretical, practical and supervised instruction. In addition to this students complete: two 3 month periods of training in a laboratory; the 1st may be subdivided into several minimum one month periods but must be completed by the end of the 2nd year and before 3rd year, the 2nd training period must be completed in the course of the 5th year. An examination is held at the end of each of the 1st four years. The pharmacy degree is conferred on students who by the end of the 5th year have passed the training course examination and have obtained two specialist certificates.	1st degree	

FRANCE

31

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
5. Enseignement de chirurgie dentaire (Dental surgery course)							
5.1. Année préparatoire (Preparatory year)	1	"Baccalauréat" (preferably experimental science or elementary mathematics) or entrance examination for students without "baccalauréat"	Preparatory year certificate		This year of study includes the subjects of the preparatory medical studies certificate added to which there are special dental studies subjects.	Higher university	
5.2. Enseignement menant au diplôme d'Etat (Course leading to State diploma)	4	Preparatory year certificate	State diploma in dental surgery		The diploma in dental surgery is conferred on students who have passed the five final year examinations.	1st degree	
B) System after introduction of "loi d'orientation"							
I. UER sciences					Studies can be divided into three cycles:	Higher university	
I.1. 1st cycle	2	"Baccalauréat" C, D, D' and E or on personal decision of dean (after consultation of school record) for those with "Baccalauréat" A or B and for candidates with equivalent French or foreign certificates. In latter cases, the dean decides section in which student will enrol.	University diploma in scientific studies (DUES) Maths-Physics; Chemistry-Biology.		1st cycle giving a basic training of 2 years at end of which a degree in scientific studies (DUES) is granted with mention of specific section attended. Students admitted to DUES course or who have an equivalent qualification are notified by a jury advising them to take either a "maîtrise" or a "licence" or a university diploma in technology.	Intermediate diploma	

FRANCE

32

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
I.2. 2nd cycle	1	DUES or equivalent French or foreign qualification	"Licence" (teaching degree)		The 2nd cycle gives a more intensified training at end of which a teaching diploma (licence-1 year) is awarded or a "maîtrise" which includes four certificates and is prepared over 2 years. The "licenciés" can continue their studies for the "maîtrise" in which case they are exempted from one of the certificates and, with the dean's permission, can present the other three together. Holders of the "maîtrise" certificates can obtain the equivalent of a teaching degree after a complementary examination.	1st degree	
	2	DUES or equivalent French or foreign qualification	"Maîtrise" (Post-graduate diploma) in research in teaching		The 1st and 2nd cycles include theoretical instruction, supervised instruction and practical classes. Theoretical instruction is given in the form of lectures. Supervised work consists of revision and explanatory exercises, training students to work on their own. Practical instruction includes, depending on the subjects, question tests together with an explanation on the course, practical exercises, experiments or field work. Attendance is compulsory except when permission to the contrary is granted by the dean and no one is allowed to take the examinations unless they have attended supervised and practical classes regularly or have been exempted from same.	Post-graduate	
I.3. 3rd cycle					The aim of the 3rd specialization cycle is to give students a more thorough knowledge of a particular subject and to introduce them to contemporary scientific techniques and research. The certificates awarded in the course of the 3rd cycle are the	Post-graduate	
I.3.1. Diplôme d'études supérieures (Diploma of higher studies)	1	On examination of candidate's dossier, dean's personal decision	DES (Diploma of higher studies)		- diploma of higher studies (DES) for which no specific qualification is required except when the diploma exam has been taken with a view to the "agrégation" in which case the title "licencié" is required. This diploma requires 1 year's	Post-graduate	

FRANCE

33

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
I.3.2. Diplôme d'études approfondies (Diploma of intensified studies)	1	"Maîtrise" in science or equivalent degree	DEA		preparation and the presentation of a memoir. - the diploma of intensified studies (DEA) - preparation includes theoretical courses ending with an attestation of intensified studies (AEA) and introduction to research. The DEA is awarded to holders of the AEA who have presented a memoir.	Post-graduate	
I.3.3. Doctorat de 3ème cycle (3rd cycle doctorate)	1 or more	DEA or diploma awarded by the National Institute of Science and Nuclear Techniques	Specialized doctorate of 3rd cycle		- the 3rd cycle specialized doctorate - preparation of which requires a minimum of 1 year after the DEA. The student is required to present a thesis.	Post-graduate	
I.3.4. Diplôme de docteur-ingénieur (Doctorate in engineering)	2 or more	Engineer title awarded by a school named on the list drawn up by the Ministry of Education or a school recognized by the council for academic awards. Candidates are required to hold a DEA or equivalent foreign qualification.	Doctorate in engineering		- the doctorate in engineering - The aim of this doctorate is to favour research in the application of science. A minimum of 2 years study and research in a science laboratory followed by presentation and defence of a thesis is required.	Post-graduate	
I.3.5. Doctorat d'État (State doctorate)	4 or more	"Maîtrise" in science, DEA doctorate of 3rd cycle, doctor's diploma or equivalent French or foreign certificates	State doctorate		- The State doctorate - This degree is awarded after a minimum of 4 years work and research and after the presentation and defence of a main thesis on a subject approved by the faculty which constitutes an original contribution to research and a shorter complementary thesis on a subject proposed by the faculty. The latter was abolished in 1969. The State doctorate is the highest university award and enables holders to appear on the university teaching staff recruitment list.	Post-graduate	

FRANCE

34

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.I. Classification	
						Type of Education (7)	Years of Study (8)
I.3.6. Doctorat d'Université (University doctorate)	1 or 2	"Licence" (1st university degree) or a curriculum vitae	University doctorate		- The University doctorate - This requires presentation of a thesis on personal research, but does not include any teaching qualification. Preparation of the doctorate is generally of particular interest to foreigners.	Post-graduate	
I.3.7. "Agrégation"	Variable		University "agrégé"		High-level competitive examinations for recruitment of 2nd cycle secondary teachers - see 1.3.6.	-	
II. UER Lettres et sciences humaines (Arts and human sciences)					Studies are divided into 3 cycles:	Higher university	
II.1. 1st cycle	2	All types of "Baccalauréat" or French or foreign certificate considered as equivalent or giving exemption, and, in certain circumstances, holders of technician's "baccalauréat"	University diploma of literary studies (DUEL)		1st cycle - introduction including 2 years of study devoted to acquisition of basic knowledge in branch of study chosen by student, and known as dominant subject (or major) and complementary courses in secondary subjects (or minor). The 1st cycle includes several sections: classical arts subjects, modern arts subjects, modern foreign languages, history, history of art and archaeology, geography, philosophy, psychology, sociology.	Intermediate diploma	
II.2. 2nd cycle	1	DUEL or at least 4/5 of the credits (unités de valeur - UV) required for the preparation of a "Licence" and 2/3 of the UV or certificates required for the licence after the DUEL for the preparation of a "maîtrise"	Licence (1st degree)		A 2nd cycle of more intensified training at the end of which a - "Licence" (1st degree) is awarded requiring 1-year's preparation and consists of two certificates, either a "licence" certificate and a "maîtrise" certificate or two "maîtrise" certificates. There are two types of "licence": the "licence d'enseignement" (teaching degrees) where the choice of certificates is fixed and the "licences libres" (general degrees) where candidates can prepare certificates of their own choice. Or, a	1st degree	
	2		Maîtrise (Post-graduate diploma)		- "Maîtrise" requiring 2 years preparation consisting of either two "maîtrise" certificates and a memoir or	Post-graduate	

FRANCE

35

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
II.3. 3rd cycle					four "maîtrise" certificates. Three types of "maîtrise" can be distinguished, viz. "maîtrises d'enseignements" (post-graduate teaching diplomas) which require 1 or 2 years preparation after the licence and include an additional certificate and a memoir, "maîtrises" in experimental disciplines requiring four certificates and specialized "maîtrises" consisting of two certificates and a memoir. Holders of a "licence" can prepare a "maîtrise" in 1 year. They are required to present a 2nd "maîtrise" certificate and a memoir.		
II.3.1. Doctorat de 3ème cycle (3rd cycle doctorate)	2	"Maîtrise" (post-graduate diploma)	3rd cycle doctorate		Aim of 3rd cycle is to give students a more thorough knowledge in a special field of study and to train them for research work. 3rd cycle students must participate in the activities of a work group under a director of studies. At the end of the 1st year students present a report on the work carried out during the year. At the end of the 2nd year they present a doctorate of 3rd cycle.	Post-graduate	
II.3.2. Doctorat d'université (University doctorate)	2 or more	"Licence" (1st degree) or curriculum vitae	University doctorate		3rd cycle studies terminate also with presentation of university doctorate which does not qualify for a teaching post. In order to obtain the doctoral title candidates must pass an oral examination including questions and practical exercises designed to check that they have sufficient introduction to research techniques and knowledge of the special field of study constituting the subject of their thesis. Candidates must also present a thesis before a jury on a subject approved by a member of university teaching staff.	Post-graduate	

FRANCE

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
II.3.3. Doctorat d'Etat (State doctorate)	Varia- ble	"Maîtrise" (post- graduate diploma) or equivalent foreign qualification	State doctorate		Studies of 3rd cycle can also lead to a State doctorate. In order to obtain this title, students must present a thesis or papers of a high quality on original work showing ability for re- search work and that they possess the required knowledge. A state doctorate often requires a very long period of preparation (on average 10 years) but measures are being taken to reduce this to 5 or 6 years. This is the highest university award and allows candidates to appear on the university teaching staff recruitment list. See 1.3.6.	Post- graduate	
II.3.4. "Agrégation"	Varia- ble		University "agrégé"			-	
II.4. Instituts spécialisés (Specialized Institutes)							
II.4.1. Institut d'études du dével- oppement économique et social (UER - IEDES) (Institute of Studies of Eco- nomic and Social Development)					This institute forms part of Univer- sity of Paris I and provides a compre- hensive syllabus. There was formerly a 1st cycle which was dropped after the new reform law ("loi d'orientation") was introduced. The institute is how- ever entitled to award 1st cycle credits which are recognized in the research and education centres of the universities of Paris for the award of their own diplomas.	Higher university	
- 2nd cycle	2	Certificate of general studies in economy (DEEG) or university diploma in literary studies (DUEL) or univer- sity diploma in scientific studies or equivalent qualifications plus test of acad- emic achievement and aptitude set by a board of exam- iners to which all candidates are subjected.	IEDES 2nd cycle diploma		2nd cycle includes firstly the study of basic concepts, followed by study of general categories of analysis of the main subjects (economy, sociology, mathematics and statistics, economics of education, health and food).	1st degree	

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
- 3rd cycle	2	IEDES 2nd cycle diploma or 1st degree or diploma from one of the "grandes écoles" plus test of academic achievement and aptitude set by a board of examiners	3rd cycle diploma		3rd cycle work takes the form of tutorials and work groups providing an introduction to working out of development policies and to practical aspects of research. Seven main options can be distinguished. Students are required to complete a period of training within a State or privately owned organisation which is either of national or international status in order to study development problems.	Post-graduate	
II.4.2. Institut de démographie (Institute of demography)	1	1st degree or diploma from a "grande école"	Diploma in general demography		In general, diplomas in demography can also be prepared in university institutes or interfaculty centres and certificates are delivered by the corresponding faculties of law and economic science. Up to now however only the Paris Institute of Demography (IDUP: Paris University Institute of demography) and the Bordeaux University Institute of demographic studies (IEDUB) have delivered these diplomas.	Higher university	
	1		Demographic expert's diploma			Post-graduate	
III. UER - Droit et sciences économiques (Law and economics)					The Paris Institute of demography has risen to the status of an UER as a result of the new reform law "loi d'orientation" and is part of University of Paris I. As from 1970 it has become possible to run a course leading to a doctorate in a specialist subject.		
III.1. Droit (Law)							
III.1.1. Enseignement menant au diplôme de capacité (Instruction leading to proficiency certificate)	2	No diploma required	"Capacité" (Proficiency certificate) in law		Holders of this proficiency certificate with an average of 12/20 can enrol in 1st year of law course.	Higher non-university	

FRANCE

38

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
III.1.2. Enseignement menant à la licence (Instruction leading to 1st degree)							
- DEUG	2	"Baccalauréat" or equivalent certificates including the proficiency certificate ("capacité") with an average mark of 12	Diploma of general legal studies (DEUG)		Instruction is theoretical and practical and is supervised by university teachers and "agrégés". At the end of each year there are examinations to be passed before enrolment in following year. DEUG studies correspond to the 1st cycle in arts or science faculties and "licence" to the 2nd cycle.	Higher university	
- Licence (1st degree)	2	DEUG	"Licence" 1st degree			1st degree	
III.1.3. Enseignement de doctorat (Doctorate)							
- DES	1	Licence	DES (diploma of higher studies)		Holders of the DES can present a thesis in order to obtain the Doctorate, but the Doctorate, in itself, does not constitute a university teaching qualification. Only doctors in law who have passed the "agrégation" (high level competitive examination comparable to State doctorates of Arts and Science faculties) can do this.	Post-graduate	
- Doctorat (Doctorate)	1	DES	State doctorate			Post-graduate	
III.2. Sciences économiques (Economics)							
III.2.1. Enseignement menant à la licence (Instruction leading to 1st degree)					Organisation of courses is same as for law courses (see III.1.2. and III.1.3.).	Higher university	

FRANCE

39

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
- DEEG	2	"Baccalauréat" or equivalent certificate	Diploma of general economic studies (DEEG)		Certain diplomas give access to 3rd year of studies after a special examination.	Intermediate diploma	
- Licence (1st degree)	2	DEEG	"Licence" (1st degree)			1st degree	
III.2.2. Enseignement menant au doctorat (Course leading to doctorate)							
- DES	1	Licence	Diploma of higher studies			Post-graduate	
- Doctorat (Doctorate)	1	DES	State doctorate			Post-graduate	
IV. UER Médecine (Medicine)						Higher university	
IV.1 1st cycle	2	Admission to different sections depends on type of "baccalauréat". Enrolment in any section other than that specified is subject to examination	1st cycle diploma		Courses in medicine are given in university hospital centres (CHU). There are three sections (A, B, C), all of which lead to the degree of doctor of medicine. Section C is biased in favour of studies and research in human biology. Courses are given for 40 weeks of the year. Attendance at courses often assessed in the form of "unités de valeur" (credits) is compulsory. A total of credits is reached each year. At the end of the 1st cycle and during the 3rd, 4th and 5th year, students must undertake hospital duties. They do their work under the guidance of the medical staff and the surveillance of the resident student. In 4th and 5th year they are paid for this work. The degree is conferred after 7 years of studies, the last year taking the form of a practical period of training. Complementary studies of variable duration are necessary for special fields of study, e.g.: gynecology, cardiology, ophtalmology, etc.	Intermediate diploma	
IV.2. 2nd cycle	5	1st cycle diploma	Degree of doctor of medicine			1st degree	

FRANCE

40

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
IV.3. 3rd cycle	2	Degree of doctor of medicine	"Maitrise" in human biology. Degree is conferred on doctors of medicine and is not comparable to other types of "maitrise".		Courses in human biology constitute a special field of study reserved for doctors of medicine in Section C who can obtain this degree after preparing three certificates in human biology.		
		"Maitrise" in human biology	Diploma in studies and research in human biology		The diploma in studies and research in human biology is awarded to candidates who hold a "maitrise" in human biology and who have passed an examination of extensive studies or to holders of an equivalent qualification together with presentation of a memoir on completion of a training period of at least 2 years in a laboratory.	Post-graduate	
V. UER Chirurgie dentaire (Dental surgery)	Variable	Diploma in studies and research in human biology	Doctorate in studies and research in human biology		In order to obtain this doctorate a thesis must be presented and defended.	Post-graduate	
V.1. 1st cycle	2	Admission to different sections depends on type of "baccalauréat" held, and enrolment in any section other than that specified is subject to examination	1st cycle diploma		1st cycle same as for general medicine course (see IV.).	Higher university	
V.2. 2nd cycle	3	1st cycle diploma	State diploma in dental surgery		In order to obtain a State diploma in dental surgery, students are required to follow a 3-year training course in a national school of dentistry within a university hospital centre (CHU) or in a private establishment, on completion of 1st cycle.	Intermediate diploma	
						1st degree	

FRANCE

41

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
V.3. 3rd cycle	2	State diploma in dental surgery or doctorate in medicine	State doctorate in dental surgery		The doctorate leads to research and to teaching profession.	Post-graduate	
VI. UER Pharmacie (Pharmacy)						Higher university	
VI.1. Diplôme de pharmacien (Diploma)	5	"Baccalauréat"	State diploma in pharmacy with mention of one of options		After end of 1st year of course students are required to undergo a six weeks training period. The training period must take place outside the university year in an approved laboratory. The pharmacy course covers three options: laboratory work, industry and biology. Complementary studies of variable duration are necessary for certain particular activities (analysis laboratories, research, etc.).	Post-graduate	1st degree
VI.2. Doctorat (Doctorate)	3 and more	State diploma in pharmacy	State doctorate		Presentation of a thesis in addition to certificates of higher studies is required.	Post-graduate	
10. Ecoles d'ingénieurs (Schools of engineering)	Variable depending on school	"Baccalauréat" with specific type mentioned: in some cases 2 years of preparation required and pass in competitive entrance examination	Engineer's diploma with mention of name of school	Full time	This category of schools covers a great variety of institutions which award engineer's diplomas of different market values. There exists a hierarchy among these schools based on the quality of selection in the recruitment of students and the type and standard of courses given: certain schools (Polytechnics, Central School of Arts and Manufacturing, National Institute of Agronomy, etc.) recruit students by a competitive entrance examination which demands 2 years of preparation after the "baccalauréat", whereas other schools recruit at a lower level. The length of the period of studies which varies from one school to another often depends on the level of entrance requirements. Courses generally last 3 years in schools which recruit after 2 years spent in preparation for entrance examination and 4 or 5 years in other institutions.	Higher university	
- General training							
- Aeronautics							
- Agriculture							
- Food science							
- Wood							
- Ceramics							
- Chemistry							
- Clock and watch making							
- Shipbuilding							
- Leather and hides							
- National defence							
- Electricity							
- electromechanics							
- electrotechniques							
- Hydraulics							
- Nuclear energy							
- Industrial							
- Refrigeration							

FRANCE

42

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
- Nuclear science and techniques - Computer studies - Applied mathematics - Mechanics - motors - Metallurgy - Meteorology - Mining - Geology - Physical Geography - Optics - Paper industry - Physics - Radio and telecommunications - electronics - Geographical sciences - Textiles - Topography - Transport - Public works and building					The conception of education and training of students is different from university training. Instruction is based on a general education adapted to specific ends and aiming at a certain degree of specialisation. Some schools of engineering are administered by the Ministry of National Education or another ministry. Others are run privately. Some schools of engineering also give preparation for higher technical diplomas of non-university level.		
11. "Grandes Ecoles" (Specialised institutes of higher education) other than engineering schools				Full time	Unlike the engineering schools diplomas, there is no official list of diplomas recognized by the State for the schools mentioned opposite. Consequently the decision to classify them as "Grandes Ecoles" is, even according to the Ministry of National Education Statistics Services where the list is compiled, open to question and this incomplete list is subject to alteration. These schools are run either by the Ministry of National Education or by other ministries or are private establishments.		

FRANCE

43

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.1. Agriculture 11.1.1. Ecoles nationales vétérinaires (National schools of veterinary medicine)	4	Competitive examination open to holders of "baccalauréat" or engineer's diploma in agronomy	State doctor of veterinary medicine	Full time	Preparation for the competitive examination takes 1, or more often 2 years. Foreign students may be admitted either under the same conditions as French students, in which case they are awarded the title of State doctor of veterinary medicine at the end of the course or on the strength of their qualifications whereupon they prepare a university doctorate in veterinary medicine. Various specialist subjects can be studied after obtaining the diploma.	Higher university	
11.1.2. Ecoles supérieures féminines agricoles (Agricultural colleges for women)	4	Competitive examination open to holders of "baccalauréat" C, D, D ¹ , E.	Engineer's diploma	Full time	Students can enter 2nd year on the strength of their qualifications and graduates can enrol for the theoretical examination of the 2nd cycle secondary teacher's proficiency certificate in agriculture and thereafter prepare the practical examination of the CAPLA in 1 year.	Higher university	
	3	Competitive examination open to holders of the "baccalauréat" or agricultural technician's certificate	After 2 years: Diploma in agronomy	Full time	The 3rd year is devoted to professional training leading to the practical examination of teaching proficiency certificate for teaching in agricultural colleges and schools or vocational courses in agriculture (CAPCA).	Higher non-university	
	2	Competitive examination open to holders of the "baccalauréat" or agricultural technician's certificate	Higher agricultural technician's diploma or diploma of school	Full time	Various specialist courses exist.	Higher non-university	

FRANCE

44

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.1.3. Institut de promotion et d'expansion agricoles (Institute of agricultural promotion and expansion)	3	"Baccalauréat" or agricultural technician's certificate or equivalent qualifications	After 2 years: university diploma of higher studies	Full time	Formerly, Agricultural Institute of Lille, the Institute became a UER in 1969. The aim of the course is to train top level agriculturalists equipped to manage all agricultural activities of their region. A 4th and 5th year of studies are being considered with a view to preparing a diploma in engineering.	Higher university	
11.1.4. Institut agronomique méditerranéen (Institute of Mediterranean agronomy)	11 months	University diploma in agriculture or sylviculture	Diploma	"	This institute is part of the International centre of higher studies in Mediterranean agronomy. There is a similar institute at Bari in Italy. Courses are of post-graduate level.	Higher university (post-graduate)	
11.1.5. Institut d'élevage et de médecine vétérinaire des pays tropicaux (Institute of stock-breeding and veterinary medicine in tropical countries)		Doctor of veterinary medicine or engineer in agronomy	Diploma of the Institute	"	Post-graduate level specialized education.	Higher university (post-graduate)	
11.2. Beaux-arts et architecture (Fine arts and architecture)				"	Includes several courses:	Higher university	
11.2.1. Ecole nationale des beaux-arts et écoles régionales (National school of fine arts and regional schools)				"			
- Architecture	8-9	"Baccalauréat" or equivalent certificates for enrolment in preparatory class. After 2-3 years in preparatory class candidates must sit a highly competitive	Title of qualified architect conferred by government (DPLG)	"	The course is divided into a preparatory class of 2-3 years, a 2nd class of 3 years and a 1st class of 2-3 years. Instruction includes oral classes and practical classes which take place in ateliers under guidance of lecturers and assistants.		

FRANCE

45

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
- Peinture, gravure, sculpture (Painting, engraving, sculpture)	Variable	examination before going into 2nd class "Baccalauréat" or equivalent titles and examination including presentation of dossier of student's own works plus an interview before a jury	Higher diploma in art	Full time		Higher university	
- Urbanisme (Town planning)	2	Architect's diploma or have reached the 2nd part of the 1st class in architecture. 1st degree or equivalent or higher qualifications.	Diploma in Town planning	Full time	Instruction is given in the ateliers and tutorials and is not included in the normal syllabus of architectural studies.	Higher university (post-graduate)	
11.2.2. Ecole spéciale d'architecture (ESA) (School of special architecture - ESA)	4-5	"Baccalauréat" C, D or E or equivalent certificates for admission to preparatory class (or 4th class). After 1 or 2 years in the preparatory class a competitive entrance examination to 3rd class must be sat.	Diploma of school of special architecture	Full time	Course is divided into classes. Students divide their time between the atelier and lectures. At the end of the 1st class student becomes "certifiable", in which case he is required to prepare the architect's diploma, DESA, in 3-6 months under the direction of the school.	Higher university	
11.2.3. Ecole d'architecture de l'Ecole nationale supérieure des arts et industries de Strasbourg (ENSAIS) (School of architecture of the Higher National School of Arts and Industry of Strasbourg - ENSAIS)	4	To enter preparatory section, students are required to be less than 22 years old and have "baccalauréat" D or E. After 1-year's preparation a competitive entrance examination must be taken.	Architect's diploma of the ENSAIS	Full time	The competitive entrance examination is highly selective and the number of entrants is limited to 15 per year; candidates must go through the same examination as the engineers of the ENSAIS with, in addition, a special examination testing their artistic ability. At the end of each year, there are examinations before enrolment in the following year.	Higher university	

FRANCE

46

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.2.4. Ecole nationale supérieure des arts décoratifs (Higher National School of Decorative Arts)	4	Competitive examination. No diplomas necessary but age limit 17 to 25 years at most.	Title of qualified decorator of the school	Full time	There is a 3-year basic course and a more specialized course made up of works done in the school ateliers.	Higher university	
11.2.5. Ecole du Louvre (School of Louvre Museum)	3-4	"Baccalauréat"	Title of former pupil of the school of the Louvre Museum and title of graduate of same	Full time	The course has a 3-year cycle of studies giving the title of former pupil and a 1-year course in study of museums open in certain circumstances to former pupils and to holders of a university degree in literary studies (history of art). Students who pass the final examinations in study of museums can present a memoir in the 4 years following the course giving them the title of graduate of the Louvre.	Higher university	
11.2.6. Conservatoire national supérieur de musique (Higher National Conservatory of Music)	5	Variable	Prize awarded by the school	Full time		Higher university	
11.2.7. Conservatoire national d'art dramatique (National Conservatory of Dramatic Art)	Variable	Variable	Prize awarded by the school	Full time		Higher university	
11.2.8. Institut des hautes études cinématographiques (Institute of Cinematography)	2		- Producer - Script writer - Filming - General course	Full time	Diploma with mention of specialized branch of study.	Higher university	

FRANCE

47

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.3 Commerce (Commercial schools)	Variable 2-3	"Baccalauréat". ¹ In some cases, 1 to 3 years preparation in addition to "baccalauréat" and competitive entrance examination.	Diploma with men- tion of school's name	Full time	As for engineers, this category of institution covers a great variety of schools of which the diplomas have different market values. Some schools (School of Higher Commercial Studies- HEC, men and women's section, Higher School of Economy and Commerce-ESEEC, etc.) recruit students through a com- petitive examination requiring 1-3 years preparation after the "baccalau- réat" whereas other schools or insti- tutes recruit at "baccalauréat" level. Some of these schools and institutes, however, also recruit through a com- petitive examination of level of 2nd year of their courses.	Higher university	
- Ecoles supérieures de commerce (Higher commer- cial schools)							
- Institut d'études commerciales (Institute of commercial studies)							
- Institut des sci- ences financières et d'assurances (Institute of fi- nance and assurances)							
- Institut commer- cial de l'univer- sité de Nancy (Commercial insti- tute of Univer- sity of Nancy)							
- Institut d'ensei- gnement commer- cial (Commercial Institute)							
- Ecole des hautes études commer- ciales (HEC)							
- (Institute of Higher Commercial studies - HEC)							
- Ecole des hautes études commer- ciales pour jeunes filles (HECJF)							
- (Institute of Higher Commercial studies for women - HECJF)							

FRANCE

48

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
- Ecole supérieure des sciences économiques et commerciales (ESSEC) (Higher school of economics and commerce - ESSEC) - Centre de formation supérieure des cadres du commerce et de l'industrie (Higher training centres for senior commercial and industrial staff) - Ecole nationale d'assurance du CNAM (National school of assurances) - Ecole supérieure des sciences commerciales (Higher school of commerce) - Ecole supérieure d'expertise comptable (Higher school of chartered accountancy) - Centre de préparation et de perfectionnement des techniques comptables et financières (Preparatory and further training centre of accounting and finance techniques)							

FRANCE

49

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.4. Défense nationale (National defence)							
11.4.1. Ecole spéciale militaire (Military school)	2	Competitive entrance exam for holders of "baccalauréat" aged 17-22, requiring 1-year's preparation	Sub-lieutenant's diploma or foreign diploma and training report for foreigners	Full time		Higher university	
and							
Ecole militaire inter-armes de Coëtquidan (All forces military school of Coëtquidan)	1	Competitive examination open to non-commissioned officers and candidates from Military school of Strasbourg		Full time	1st and 2nd degree preparatory correspondence course. Reserve officers and non-commissioned officers who hold a "baccalauréat" are exempted from 1st degree.		
11.4.2. Ecole du service de santé militaire (Military health service schools)	7	"Baccalauréat" + 1 preparatory year	Doctorate in medicine or veterinary medicine. Diploma in pharmacy.	Full time	Three sections can be distinguished: Pharmacy and medicine in Bordeaux and Lyon; Veterinary medicine in Lyon. See above section 9.	Higher university	
11.5. Enseignement (Teaching)							
11.6. Lettres (Arts)							
11.6.1. Ecole Nationale des chartes (School of Palaeography and Librarianship)	45 months	Competitive examination open to holders of "baccalauréat"; must be under 30	Diploma of archivist-palaeographer	Full time	Students can undertake to work for the State for 10 years as from entry date to school, thus benefitting from the status of a paid civil servant in training. At the end of the 3rd year students present a thesis. Candidates training as archivists must complete a technical training course.	Higher university	

FRANCE

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.6.2. Ecole supérieure de bibliothécaires (Higher school for librarians)							
- Bibliothécaires (Librarians)	1	1(a) competitive examination for licenciates and engineers under 30 (b) competitive examination res- tricted to assist- ant librarians of national public libraries with 5 years experience and certain em- ployees under con- tracts (age limit 25-35)	Higher librarian's diploma	Full time		Higher university	
- Certificat d'ap- titude aux fonc- tions de biblio- thécaires (Proficiency cer- tificate in librarianship)	1	2. "Baccalauréat"	CAPB (Proficiency certificate in librarianship)		School provides training of technical staff and preparation for the state assistant-librarian's competitive examination.	Higher university	
11.6.3. Centre uni- versitaire des langues orientales vivantes (CULOV) (University centres of modern oriental languages - CULOV)							
- 1st cycle	2	To be 17 years old and hold a "baccalauréat" or equiv- alent qualification or entrance examination for candidates who do not hold "baccalauréat"	Introductory cer- tificate (10 credits - UV). Diploma of uni- versity centre of modern oriental languages (20 credits)	Full time	Diplomas are awarded with mention of language studied depending on a set number of "unités de valeurs" (UV) - credits. The course is divided into three study cycles.	Higher university	
						Diploma	

FRANCE

51

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
- 2nd cycle	2		Higher diploma of above-mentioned centre (30 credits)			1st degree	
- 3rd cycle	1 or more	1st degree "maîtrise", diploma of CULOV, etc.	3rd cycle doctorate			Post-graduate	
11.6.4. Ecole pratique des hautes études (School of Practical Higher Studies)	2	No special qualification required	Diploma of School of Practical Higher Studies	Full time	There are four distinct sections: from natural science to economics and social sciences. Courses take form of tutorials. The first 2 years end with the presentation of a memoir leading to the award of a diploma.	Higher university	
	2	Diploma of the school or "maîtrise" or equivalent diploma depending on a committee decision	3rd cycle doctorate		Preparation of a doctorate requires 2 years research and participation in tutorial work. The title of doctor with mention of section is conferred after presentation of a thesis.	Post-graduate	
11.6.5. Ecoles et instituts d'interprètes et de traducteurs (Schools and colleges for interpreters and translators)	2	1) 1st degree or equivalent qualification and examination in one or two modern foreign languages 2) In some cases, "baccalauréat" plus entrance examination. The DUEL gives access to 2nd year and a university degree to 3rd year.	Interpreter and translator's diploma awarded either by the Ministry of Education or the University of Paris in case 1 and by the school itself for case 2, in which case the diploma bears the name of the school	Full time	These schools and institutes are run either by the Chamber of Commerce of Paris, the University, or the Catholic Institute or faculties.	Higher university	
11.6.6. Ecole supérieure de journalisme et Centre de formation des journalistes (Higher school of Journalism and training centre for Journalists)	3	Competitive entrance examination and proficiency tests	School diploma	Full time	Courses in Journalism are also provided by the faculties of arts and human sciences and lead as is the case in other fields to the 1st degree, "maîtrise", 3rd cycle doctorate and a doctorate on mass media.	Higher university	

FRANCE

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.6.7. Ecoles et instituts de psychologie (Schools and institutes of psychology)	3-4 2	"Baccalauréat" and competitive entrance examination 1st degree in psychology	School diploma showing specialist subject studied	Full time		Higher university	
11.7. Santé (Health)							
11.7.1. Ecoles de sages-femmes (Courses for midwives)	3	Competitive entrance exam ("baccalauréat" level) for candidates of at least 18 years of age	Midwives' State diploma	Full time	Courses are given in special recognized schools affiliated to maternity hospitals. However, 2nd and 3rd year examinations are taken in faculties of medicine.	Higher university	
11.7.2. Ecole nationale de la santé publique (National school of public health)		Entry conditions vary for each section. In general, a higher diploma is necessary or candidates are required to be civil servants.	Diploma in public health with mention of section attended	Full time	The school provides training courses and complementary courses, statutory or optional sessions of refresher and further training courses.	Higher university	
1. Santé publique (Public health)	1						
2. Administration sanitaire et sociale (Sanitary and social administration)	1						
3. Section spécialisée (Special section)	4						
11.8. Sciences juridiques et administratives (Law and administration)							
11.8.1. Instituts d'études politiques (IEP) (Institute of Political Studies - IEP)	3-4	In most cases "baccalauréat" qualified as "good" or "very good" or "baccalauréat" and entrance examination for IEP of Paris	Diploma with mention of name of institute	Full time	In Paris, 1st year is known as "preparatory year". In all IEP the 1st year ends with an examination giving access to 2nd year. Students can, however, go into 2nd year directly if they hold a university degree. The majority of IEP organise a further year's course of study in preparation for the National School of Administration for those students who already hold an IEP diploma.	Higher university	

FRANCE

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Year of Study (8)
- 3rd cycle	2	Generally university degree or equivalent diploma required	Higher diploma in research and political studies	Full time	3rd cycle work is carried out in tutorials.	Post-graduate	
11.8.2. Centres de préparation à l'admission générale (Preparatory centres for general administration)	1	Continuation of higher education leading to 1st degree or equivalent qualification	No diploma	Full time	The aim of these centres is to train students, who are undertaking higher studies, for the competitive recruitment examination for civil servants in general administration. Students who already hold a university degree are not admitted.	Higher university	
11.8.3. Ecole nationale d'administration (National School of Administration - ENA)	3	1) Competitive examination open to licenciates or holders of equivalent or higher diplomas - examination often takes place after 1 year's preparation or 2) Competitive examination taken within the civil service and exclusively for civil servants	Diploma of ENA	Full time	The school trains top level civil servants. The course is divided into a training period of approximately 9 months followed by 1 year's course of study in the school, at the end of which there is a diploma examination. Holders of diplomas are classified according to rank of success and thereafter complete a second period of training in top level public services before entering working life.	Higher university	
11.8.4. Ecole nationale de la statistique et de l'administration économique et statistique de l'Université de Paris (National school of statistics and economic administration and the Institute of Statistics of Paris University)	2-3	University diploma in scientific studies or degrees in economic sciences	Statistician's diploma	Full time	The school also offers holders of the "baccalauréat" (science type) 1 or 2 year courses leading to a non-university level assistant statistician's diploma.	Higher university	

FRANCE

54

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.8.5. Ecoles de formation des cadres fonctionnaires (Training schools for senior civil servants): - Customs - Fiscal services - Surveying - Legal studies - Post office and telecommunications - Police - Maritime administration	Variable	Hold a university degree or be in process of completing higher studies Competitive entrance examination	Variable depending on public service in question	Full time		Higher university	
11.8.6. Ecole des hautes études internationales (School of higher international studies)	2	"Baccalauréat" or equivalent qualifications	School diploma	Full time	Graduates may devote a 3rd year of studies to writing of thesis. See 18.1.	Higher non-university	
11.8.7. Ecoles de notariat (Notary schools) 11.9. Sciences et techniques industrielles (Industrial science and techniques) 11.9.1. Ecoles nationales de la marine marchande (National Merchant Navy Schools)	4	Competitive examination open to holders and pupils who have completed "classes terminales" (7th year of secondary education)	After 3 year course: - probationalary officer of merchant navy diploma. After 4 year course: - diploma of higher studies of merchant navy.	Full time	After 1st and 2nd year of study students undergo a 2-month training course on board ship. Holders of the probationalary officer's diploma receive the merchant navy officer's certificate after a 10-month training period on board ship which enables them to enrol for the examination of the diploma of higher studies after 10 months at sea. Holders of the latter diploma are awarded a 1st class sea captain's certificate after 35 months at sea	Higher university	

FRANCE

55

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.9.2. Office de recherche scien- tifique et tech- nique d'Outremer (Overseas office of scientific and technical research)	1	University degree or diploma from a "grande école"	Overseas office diploma	Full time	These schools offer other courses leading to various types of officer's certificates. They are generally aimed at holders of vocational mari- time training qualifications and thus ensure regular promotion within the service. Training for personnel intending to work in tropical or arid territory.	Higher university	
11.9.3. Ecole na- tionale technique des mines (National technical mining school)	3	"Baccalauréat" in mathematics or techniques and 1 year preliminary training period	School diploma	Full time		Higher university	
11.9.4. Ecole tech- nique d'aéronau- tique et de con- struction automo- bile (Technical school of aeronau- tics and automobile construction)	4	"Baccalauréat" (science type) or technician's cer- tificate (mechani- cal construction section)	School diploma	Full time	Training of top level personnel for aeronautics and automobile industry.	Higher university	
11.9.5. Ecole su- périeure des indus- tries textiles (Higher school of textile industries)	2	"Baccalauréat" (mathematics and technical type)	Higher technician's certificate of textile industries	Full time	Type C (science) "baccalauréat" hol- ders can take the entrance examination on completion of a training period in general mechanics and industrial design. Type A (arts) and D (mathematics and natural science) "baccalauréat" hol- ders are required to complete a preparatory year.	Higher non- university	
11.9.6. Ecole de biochimie pratique (School of practi- cal biochemistry)	2	"Baccalauréat" preferably science type	Higher technician's certificate in biochemistry	Full time	Training of laboratory technicians (biochemistry, chemical biology).	Higher non- university	

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
12. Training of Higher Technicians 12.1. Instituts universitaires de technologie (IUT) (University institutes of technology - IUT)	2	"Baccalauréat" or equivalent certificate; all types of technician's "baccalauréat" or "baccalauréat" entrance examination for other candidates	University diploma in technology showing special branch of study (DUT). Certain DUT give possibility of access in certain circumstances to 2nd cycle of UER courses in Science, Law and Economic Science.	Full time	This is a type of higher education of recent creation leading to employment in secondary sector and in tertiary sector of the economy. The aim of the courses is training of advanced technicians. This type of course covers 12 main sections (standard measures, physics, mechanical engineering, computer studies, business and administration, etc.) leading to 23 special options (finance and accounting, social welfare assistants, specialized educationalists, control engineering, etc.). The development of the IUT will lead to the disappearance of the advanced technician's sections of the "lycées".	Higher non-university	
12.2. Sections de techniciens supérieurs des lycées techniques (Higher technician's sections of technical "lycées")	2	Technician's certificate, technician's "baccalauréat" or "baccalauréat" or examination for candidates who do not hold any of these certificates	Advanced technician's certificate showing special subject (BTS)	Full time	These sections train students for direct entry to posts in various economic sectors. The course includes the various specialized branches of industrial and tertiary sector. The special subjects are broken down into options. Certain BTS give access to certain education and research centres (UER).	Higher non-university	
13. Preparatory classes of the "Grandes Ecoles"	1-3	"Baccalauréat" plus a favourable report from class council	No diploma	Full time	Students in these classes prepare, in the main, the competitive entrance examinations for entrance to 1st year in "grandes écoles" specialized in science subjects (engineering schools, higher teacher training schools, etc.) or to those specialized in arts subjects (arts sections of higher teacher training schools, School of Palaeography and Librarianship (Ecole des Chartes, etc.) or in commercial subjects. In general, these preparatory classes are affiliated to the lycées. Some schools, however, organise their own preparatory classes for their competitive examinations.	Higher non-university	

FRANCE

57

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
Other types of higher education					Specialized courses are provided by public or private institutions which, as a general rule, do not require the "baccalauréat" but an equivalent level of achievement. The main institutions are listed below according to careers they lead to. Statistics concerning them are often incomplete and collected irregularly, they are not usually compiled by the Statistics Service of the Ministry of Education.		
14. Careers in health and social services							
14.1. Infirmier-infirmière (Courses for nurses - male or female)	2	Competitive examination for students without "baccalauréat" and direct admission for "baccalauréat" holders and holders of final secondary certificate	Male nurse or nurse's State diploma	Full time	Courses are given in schools attached to hospitals or in other recognized schools. Students can specialize in different fields of study (anaesthetist's assistant, technical assistant in electro-encephalographical work, etc.).	Higher non-university	
14.2. Assistante et assistante de service social (Social welfare assistants - male or female)	3	Examination of "baccalauréat" level	Social worker's State diploma	Full time	Training takes place in recognized schools. Specialization is possible (certificate of specialized rural studies, diploma of factory and social services superintendent, etc.).	Higher non-university	
14.3. Puéricultrice (Child welfare nurses)	1	Nurses, midwives or social welfare assistant's diploma	State diploma for child welfare nurses	Full time	Training provided in recognized schools.	Higher non-university	
14.4. Manipulateur (trice) en électroradiologie (Technicians in electroradiology)	2	Secondary leaving certificate or examination	State diploma for technician in electroradiology	Full time	Training provided in recognized schools.	Higher non-university	
14.5. Masseur-kinésithérapeute (Masseur-physiotherapists)	3	Admission by competitive entrance examination. "Baccalauréat" level	State diploma for masseur-physiotherapists	Full time	Training provided in recognized schools.	Higher non-university	

FRANCE

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
14.6. <u>Pédicure</u> (Chiroprodists)	2	Examination of "baccalauréat" level	State diploma in chiropody	Full time		Higher non-university	
	1	State diploma in chiropody	Technician's certificate in chiropody, orthopaedic treatment.		There is 1 year of specialization. Courses are provided in only three or four establishments.		
14.7. <u>Ergothérapeute</u> (Ergotherapist)	27 months	Examination of "baccalauréat" level	Leaving certificate	Full time	Training provided in three schools and is divided into three school cycles of 9 months.	Higher non-university	
14.8. <u>Rééducateur de la psychomotricité</u> (Courses in re-education of psycho-motory defects)	2	Examination of school dossier ("baccalauréat" level)	Proficiency certificate in re-education of psycho-motory defects	Full time	Course held in faculty of medicine of Paris.	Higher non-university	
14.9. <u>Rééducateur des troubles psychagénésiques de l'enfance et de l'adolescence</u> (Re-education of psycho-genetic troubles in children and adolescents)	3	Probationary training of 3 months ending with an examination	Proficiency certificate in welfare of sub-normal children	Full time	Course is held in faculty of medicine in Paris.	Higher non-university	
14.10. <u>Technicienne supérieure en économie sociale familiale</u> (Advanced technician in family and social welfare)	2	"Baccalauréat" level	Higher technician's certificate	Full time	The technician is responsible for helping and guiding families and social groups. Students can specialize in the 3rd year of the course.	Higher non-university	
15. <u>Literary careers</u>							
15.1. <u>Aide-documentaliste</u> (Training as documentation assistant)	16 months	No certificate is required but minimum age is 18. A good knowledge of foreign languages is recommended.	Documentation assistant's certificate	Evening courses	Training is provided by the French union of documentation organisations (UFOD). The certificate is prepared over two sessions of 9 and 7 months respectively (evening classes).	Technical secondary (b)	

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
15.2. Attaché de presse et conseiller en relations publiques (Courses for press attachés and public relations advisers)	Variable	No conditions		Full time	Schools are private and fee paying.	Technical secondary (b)	
16. <u>Teaching careers</u>							
16.1. Jardinières d'enfants (Child-nurse)	2	Entrance examination "baccalauréat" level	Child-nurse certificate	Full time	Two specialist courses are available: for maladjusted children and for nurseries.	Higher non-university	
16.2. Maîtres d'education physique (Physical education teacher)	2	Competitive entrance examination	Teacher of physical education	Full time	Holders of certificate may be in charge of post-school or in some cases school activities.	Higher non-university	
16.3.Animateur (Group leader)	2 to 3	Entrance examination	Group leader's diploma	Full time		Higher non-university	
17. <u>Commercial careers</u>							
17.1. Secrétaire (Secretarial work)	2	Admission on examination tests or competitive exam.	Higher technician's certificate (BTS)	Part time and full time	The BTS covers two options: training as managerial secretary or tri-lingual secretary. Both types of training are provided in many private schools. The "baccalauréat" is not required. Medico-social secretaries are trained by the French Red Cross and private institutions. The national association for vocational training of adults organises training courses of 6-9 months with a view to training secretaries with shorthand and typing, correspondence clerks with shorthand and typing, correspondence clerks with typing, shorthand typists.	Higher non-university	

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
17.2. Comptabilité (Accountancy)	2	Entrance examination	Higher technician's certificate (BTS) in accountancy	Full time	In addition to the IUT's which train students for university diploma in administrative technology over 2 years various private institutions provide courses leading to the higher technician's certificate and to the examination for the diploma in chartered accountancy.	Higher non- university	
17.3. Secrétariats techniques (Technical secre- tarial work)	2	Variable	Technical secre- tary's diploma (showing special- ist subject)	Full time	In addition to the higher technician's certificate of secretarial studies which is prepared in some technical 2nd cycle secondary girls' schools the technical secretary's diploma can be obtained in various private institutions.	Technical secondary (b)	
17.4. Publicité (Advertising)	3	"Baccalauréat" level	Higher technician's certificate (BTS) in advertising	Full time	Training generally takes place through evening classes and students can at the same time attend courses in law and modern languages.	Higher non- university	
18. Legal careers							
18.1. Notariat (Notary schools)	2	Admission without examination or certificate. Minimum age is 17.	School diploma	Full time	Some schools are not recognized by the State and therefore cannot award any official certificates. In order to enter the profession students are required to complete a 4-year train- ing period (6 years for non-certifi- cate holders) and have passed a professional examination.	Higher non- university	
19. Careers in agriculture							
19.1. Industrie laitière (Dairying)	2	"Baccalauréat" level	Technician's certificate	Full time		Higher non- university	
19.2. Meunerie (Milling)	2	"Baccalauréat" level	Higher technician's certificate	Full time	Training takes place in the French school of milling in Paris.	Higher non- university	
19.3. Oenologie (Oenology)	20 months	"Baccalauréat" or decision of a spe- cial committee for students without "baccalauréat"	State diploma in oenology	Full time	Training lasts 2 years followed by a 4-months training period in wine cellars.	Higher non- university	

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
19.4. Elevage (Stock-breeding)	3	Pupils of terminal classes of agri- cultural lycées (D')	Agricultural technician's certificate	Full time	Training takes place in zootechnic centre of Rambouillet: stock- breeding, sheep rearing, poultry breeding.	Higher non- university	
20. National Con- servatory of Crafts and Trades (CNAM)	Varie- ble	No entrance requirements			Conservatory course is, in particular, for people in employment. Instruc- tion has a technical or economic bias. In some cases a university diploma in technology is awarded. For mathema- tics and physics section students must hold certain diplomas, (tech- nician's certificate or vocational certificate) in order to enrol di- rectly in the 1st cycle, or failing this complete a preparatory year.	Higher non- university (comple- mentary)	
- 1st cycle			1st cycle diploma in techniques or economy of the CNAM	Part time			
- 2nd cycle		1st cycle diploma of the CNAM	Higher diploma of technical studies or in economy of the CNAM	Part time			
Engineer's diploma		Higher technical diploma of CNAM	CNAM engineer's diploma or CNAM economist	Full time	Holders of CNAM higher technical diploma can in certain circumstances prepare the CNAM engineer's diploma on a 1 year full time basis, which is remunerated.	Higher university	

Fields of Study	OECD Classification	Fields of Study	OECD Classification
<u>Higher University Education</u> <u>UFR - Science</u> Mathématiques (Mathematics) Mathématiques et applications fondamentales (Mathematics and basic applications) Mécanique (Mechanics) Technologie de la construction mécanique (Technology of mechanical building) Science naturelles (Natural Science) Physique (Physics) Chimie-physique (Chemistry-Physics) Chimie (Chemistry) Biochimie (Biochemistry) Biologie animale (Animal Biology) Biologie végétale (Plant Biology) Génétique (Genetics) Physiologie (Physiology) Géologie (Geology) Informatique (Computer studies) Electronique, électrotechnique et automatique (Electronics, electrotechnics and control engineering) <u>UFR - Lettres - Sciences humaines</u> <u>(UFR - Arts - Human sciences)</u> Lettres classiques (Classical arts) Langues vivantes étrangères (Modern foreign languages) Histoire (History) Philosophie et sciences humaines (Philosophy and human sciences) Educations musicales (Music) Arts plastiques (Plastic arts) Histoire de l'art et archéologie (History of art and archaeology) Lettres modernes (Modern Arts) Géographie (Geography) Linguistique (Linguistics) Géographie humaine (Human geography) Géographie physique (Physical geography) Logique (Logic) Psychologie (Psychology) Sciences de l'éducation (Science of education) Sociologie (Sociology) Institut d'Etudes et de développement économique et social (Institute of economic and social development studies (IDES)) Institut de démographie (Institute of demography)	Pure sciences Technology Pure sciences " " " " " " " " Social sciences Technology Arts " " " " " " Social sciences Arts Social sciences Arts " Social sciences " " "	<u>UFR - Médecine (UFR - Medicine)</u> - Médecine (Medicine) - Biologie humaine (Human biology) <u>UFR - Pharmacie (UFR - Pharmacy)</u> - Pharmacie (Pharmacy) <u>UFR - Chirurgie dentaire (UFR - Dental surgery)</u> - Chirurgie dentaire (Dental surgery) <u>UFR - Droit et sciences économiques</u> <u>(UFR - Law and Economics)</u> - Droit (Law) - Sciences économiques (Economics) Autres établissements de niveau universitaire (Other establishments of university level) Ecoles d'ingénieurs (Engineering schools) Ecoles nationales vétérinaires (National schools of veterinary medicine) Ecoles supérieures féminines agricoles (Higher agricultural schools for women) Institut de promotion et d'expansion agricoles (Institute of agricultural promotion and expansion) Institut agronomique méditerranéen (Institute of Mediterranean agronomy) Institut d'élevage et de médecine vétérinaire des pays tropicaux (Institute of stock-breeding and veterinary medicine in tropical countries) Ecoles nationales des Beaux-Arts dont Architecture (National schools of Fine Art, including architecture) Ecole spéciale d'architecture (Special schools of architecture) Ecole d'architecture de l'Ecole nationale supérieure des arts et industries (School of architecture of the higher national school of art and industry) Ecole nationale des arts décoratifs (National school of decorative arts) Ecole du Louvre (School of Louvre museum) Conservatoire national supérieur de musique (Higher national conservatory of music) Conservatoire national d'art dramatique (National conservatory of dramatic art)	Medical sciences " " " " Law Social Sciences Technology Agriculture " " " " Fine Arts Architecture " " " " " Fine Arts " " "

Fields of Study	OECD Classification	Fields of Study	OECD Classification
Institut des hautes études cinématographiques (Institute of higher studies in cinematography)	Fine Arts	École technique d'aéronautique et de construction automobile (Technical school of aeronautics and automobile construction)	Technology
Écoles supérieures de commerce et assimilées (Higher and associated schools of commerce)	Social sciences	École supérieure des industries textiles (Higher school of textile industries)	"
École spéciale militaire et inter-armes (Special military and all-forces military schools)	Others	École de biologie pratique (School of practical biology)	"
Écoles du service de santé militaire (Military health schools)	Medical science	Enseignement normal (voir section 8) (Teacher training (see section 8))	"
École nationale des chartes (National school of palaeography and librarianship)	Humanities	Enseignement supérieur non universitaire (Higher non-university type education)	"
École supérieure de bibliothécaire (Higher school for librarians)	"	Département d'enseignement des IUT : (IUT teaching departments :)	"
Centre universitaire des langues orientales vivantes (University centres of modern oriental languages)	"	Administration des collectivités publiques et des entreprises (Administration of public communities and firms)	Social sciences
École pratique des hautes études (School of practical higher studies)	According to section	Biologie appliquée (Applied biology)	Pure sciences
Écoles et instituts d'interprètes et de traducteurs (Schools and Institutes for interpreters and translators)	Humanities	Carrières de l'information (Careers in mass media)	Social sciences
École supérieure de journalisme et assimilées (Higher school of journalism and associated centres)	Social sciences	Carrières sociales (Careers in social work)	"
Écoles et instituts de psychologie (Schools and Institutes of Psychology)	Humanities	Techniques de commercialisation (Marketing techniques)	"
Écoles de sages-femmes (Schools for midwives)	Medical science	Informatique (Computer studies)	"
École nationale de la santé publique (National school of public health)	"	Techniques statistiques et quantitatives (Quantitative and statistical techniques)	"
Instituts d'études politiques (Institute of Political studies)	Social sciences	Chimie (Chemistry)	Pure sciences
Centre de préparation à l'administration générale (Preparatory centres for general administration)	"	Génie civil (Civil engineering)	Technology
École nationale d'administration (National school of Administration)	"	Génie électrique (Electrical engineering)	"
École nationale de la statistique et de l'administration économique (National school of statistics and economic administration)	"	Génie mécanique (Mechanical engineering)	Pure sciences
École de formation des cadres fonctionnaires (Training school for senior civil servants)	"	Mesures physiques (Standard measures)	Technology
École des hautes études internationales (School of higher international studies)	Technology	Thermique (Thermodynamics)	"
Écoles nationales de la marine marchande (National Merchant Navy schools)	"	Sections de techniciens supérieurs des lycées (Higher technicians sections in 2nd cycle secondary schools)	"
Office de recherche scientifique et technique d'outre-mer (Overseas office of scientific and technical research)	"	Agriculture et industries agricoles (Agriculture and agricultural industries)	Agriculture
École nationale technique des mines (National technical mining school)	"	Bâtiments, travaux publics (Building and public works)	Technology
		Chimie, analyse biologique, biochimie (Chemistry, biological analysis, biochemistry)	Pure sciences
		Transformation des matières plastiques (Processing of plastics)	Technology
		Electricité, électrotechnique, électromécanique (Electricity, electrotechnics, electro-mechanics)	"
		Horlogerie, micro-mécanique, mécanique de précision (Clockmaking, micromechanics, precision mechanics)	"

FRANCE

CLASSIFICATION OF HIGHER EDUCATION BY FIELDS OF STUDY

64

Fields of Study	O.E.C.D. Classification	Fields of Study	O.E.C.D. Classification
Industries extractives, prospection (Extract industries, prospecting) Mécanique, métallurgie (Mechanics, metallurgy) Optique, photographie, cinématographie (Optics, photography, cinematography) Textile (Textiles) Commerce, tourisme (Commerce and tourist trade) Contrôle des rayonnements ionisants et applications des techniques de protection (Control of radioactive rays and application of protection techniques) Conseillère-avocate (Vocée economic adviser) Assistante d'ingénieur (Engineer's assistant) (female) Diététicien (Dietician) Traitement de l'information (Computer studies) Economie sociale familiale (Social family economy) Esthétique industrielle (Industrial design) Classes préparatoires aux grandes écoles (Preparatory classes of "grandes écoles") Autres types d'enseignement (Other types of higher education)	Technology " " " Social sciences Technology Social sciences " " " Others According to school concerned Medical science Social sciences Medical science " " " " Social sciences " " Education " " Social sciences "	Notariat (Notary) Ménagerie (Milling) Oenologie (Wine making) Élevage (Stock breeding) Conservatoire national des arts et métiers (National conservatory of crafts and trade)	Law Agriculture " Technology or social sciences
Infirmer (Nursing) Assistante sociale (Social worker) Pédiatrice (Child-care) Manipulateur en électroradiologie (Technician in electro-radiology) Masseur kinésithérapeute (Masseur-physio-therapist) Pédicure (Chiropodist) Ergothérapeute (Ergotherapist) Rééducateur de la psychomotricité (Re-education of psycho-motory defects) Rééducateur des troubles psychagénésiques (Re-education of psycho-genetic troubles) Technicienne supérieure en économie sociale familiale (Advanced technician in family and social welfare) Aide-documentaliste (Documentation assistant) Attaché de presse (Press attaché) Publicité (Advertising) Jardinier d'enfants (Nursery teacher) Maître d'éducation physique (Physical education teacher) Animateur (Group leader) Secrétaire (Secretarial work) Comptabilité (Accountancy) Secrétariat technique (Technical secretarial work)	" " " Social sciences " " " " Social sciences " " Education " " Social sciences "		

Teachers	Place of Training	Length of Study (in years)	Other Information
Nursery schools	Primary teacher training colleges	2-5	There is no special training course for nursery school teachers who study the same programme as primary school teachers. However, the student teachers in the training schools generally complete a period of training in a nursery school. In addition to this, the written part of the primary teachers' proficiency certificate examination includes an option "nursery schools". This examination is taken mainly by supply primary teachers.
Primary schools (and classes terminating primary education)	Primary teacher training colleges	2-5	In each "département" there is, in theory, a training college for men and one for women. The length of the period of study depends on the level of recruitment. Recruiting is always done by competitive examination either on admission to 1st year or 3rd year. For admission to 1st year, candidates are not required to have a certificate but must be over 14 and under 16 years of age on 1st January of the year of the competitive examination (exceptions in favour of age made) and require proof of completion of studies to end of 3rd form (9th year of schooling). Once they have passed the competitive entrance examination, the student teachers first of all prepare the "baccalauréat" in 5 years followed by 2 years of training in teaching methods. In recent years training courses have been provided in the "lycées" (general secondary schools) similar to those held in the primary teachers training colleges. The competitive entrance examination is common to both courses. However, those candidates who have passed the entrance examination and who have already successfully completed 5th year (classe de seconde) can go directly into 2nd year. They prepare the "baccalauréat" in 2 years followed by 2 years of training in teaching methods. "Baccalauréat" holders who have passed the 3rd year competitive entrance examination (under 18 years of age with possibility of exceptions in favour of age) complete 2 years of training in teaching methods. Instruction in primary teacher training schools covers a syllabus of general training which is the same as the syllabus in the 2nd cycle of secondary education leading to the "baccalauréat" together with a programme of professional training including theoretical and practical aspects. Theoretical instruction includes a study of child psychology, general and specialized pedagogy, study of social factors, history of education and of technical pedagogical doctrines, together with the complete syllabus of studies which the intending primary teachers will be required to teach. Practical teaching is done within the period of training in teaching methods, thus giving the future primary teachers the opportunity of a progressive introduction to professional duties. Minimum duration of training period is 25 days. There are special training courses for teachers in special schools. During the 2nd year of professional training, the students are in charge of classes inasmuch as there are vacant posts (supply teaching done under the supervision of a pedagogical advisor). At the end of the training period a final primary teacher training certificate is awarded (CFPEH). Holders of the CFPEH then become probationary teachers and are exempt from the written and oral examinations of the certificate in teaching proficiency (CAP). In order to become certificated they have to undergo only the practical examination of CAP during their 1st term of teaching. They become qualified on 1st January of the following year.

Institutes	Place of Training	Length of Study (in years)	Other Information
1st cycle secondary education - CES-CES (Colleges of secondary education and colleges of general education)			It is possible for primary school teachers to have access to secondary teaching by preparing the teacher's proficiency certificate of general colleges of education (CAP-EGC). They can also train for entrance to institutions of higher education or prepare a specialized teaching certificate for secondary education after their professional training. Within the "départements", and when there is a shortage of qualified primary teachers, substitute teachers are recruited through a competitive examination from among pupils with or without the "baccalauréat". "Baccalauréat" students undergo a 2-year period of professional training, 6 months of which is dedicated to a general training. At the end of the 2nd year they sit the full CAP. They become certificated 4 or 5 years after the date of their enrolment on the list of substitute primary teachers. Students without "baccalauréat" are enrolled provisionally on the departmental list of substitute primary teachers. They receive the same professional training as "baccalauréat" holders but cannot become certificated. Type of training given to teachers in CES-CES is a result of the re-organisation of the complementary courses (CC). As the former are now part of the new CES and CES, changes have been made in the type of training given to teachers according to whether they desire to teach in section II (CES type) or in section I ("lycée" type) or in a transition and practical terminal cycle (section III).
Section III (former transition and practical terminal cycles)	Regional centres	2	In order to teach in transition and practical terminal cycles, candidates must hold corresponding teaching proficiency certificates. These certificates are granted at the end of a 2-year period of instruction which takes place after the "baccalauréat". Preparation for these proficiency certificates in teaching (CAP) is open to qualified primary teachers with 5 years teaching experience. As a temporary measure, however, the 1st year of this course is to be done by correspondence: at the end of this year candidates sit examinations giving them access to regional centres where the actual preparation of the certificate of teaching proficiency takes place after a 1-year probationary training period. As in the case of the other CAP, training has two parts, one in theory and the other in pedagogy. Training given in these centres puts an emphasis, however, on acquiring knowledge of the child, the pre-adolescent and the adolescent. There is also an emphasis put on knowledge of environment and daily life (experience in factories) and a great part of the course is devoted to the study of sociology.
Section II (CES type) - General instruction	Regional centres for training of CES teachers or special sections of primary teacher training schools	3-4	Training of teachers of general subjects in CES-CES has been extended from 2 to 3 years after the "baccalauréat" (certificated teachers being trained in 4 years). They complete the 1st cycle of higher education. However, with the reforms in higher education, CAP-EGC candidates in arts subjects now complete a modified 2-year 1st cycle after which they can do either the year of professional training for CES teachers given in regional centres, as probationary teachers or the final degree year or prepare a "maîtrise" at a university.

FRANCE

TEACHER TRAINING

67

Teachers	Place of Training	Length of Study (in years)	Other Information
Teaching of domestic science			2nd year probationary teachers (this 2nd year of professional training was organized in 1962) continue their higher studies and receive training in teaching methods spread over 15 hours a week of which 7 are devoted to general pedagogy and 8 to pedagogical problems particular to teaching in CEG's. Before the beginning of the university year they complete a training period of 1 month from 15th September to 15th October in a 2nd year of the intermediate class of primary schools and during the school year must do 1-day's training a week in a CEG under the advisor's supervision. The training period report is made up of these weekly exercises. Probationary teachers holding university degrees are admitted directly into 2nd year and complete 1 year of supervised interim teaching, a principle also applied in primary teacher training schools. There is a regional centre in every main town of an educational region (académie). Each centre has four sections and a special option for domestic economy and rural domestic economy. Training is comprehensive within the broad subject categories. Subjects are grouped in pairs. At the end of the 2nd year of professional training (or supervised interim year as the case may be) probationary teachers sit the final primary teacher's training certificate examination (CFEN), then the CAP-ECC which includes written and oral parts. If candidates pass this examination they go into a CEG type section. At the end of the year they sit the practical examinations of the CAP-ECC which take the form of an inspection after which they are considered qualified. The theoretical part of the examination, written and oral, is based either on the literary subjects or science subjects taught in the colleges of general education (CEG). Student teachers training in domestic economy or rural domestic economy can choose either of two possibilities in 1st year: (1) Those who wish to and are capable of preparing a certificate of higher education preliminary to a science degree (PCB, MPC or SPCH) can enrol in a special section of a regional centre. (2) Alternately they prepare the CAP-ECC in the regional centre of Montlignon where main subjects studied are physics, natural and human sciences and the technological aspects of domestic science training. All the students attend Montlignon in their 2nd year of training where the emphasis is on the theoretical and practical aspects of teaching. During the year students prepare the CFEN and the CAP-ECC according to the above-mentioned terms.

Teachers	Place of Training	Length of Study (in years)	Other Information
Section I ("lycée" type) and 2nd cycle of classical and modern secondary schools	University or training centres such as (1) IPES and CPR; (2) higher teacher training colleges	5-6	The ability to teach in these sections is guaranteed by two certificates proving competence obtained in competitive examinations: the "CAPES" (certificate of proficiency in secondary teaching) and the "Agrégation" (competitive examination for recruitment to higher posts in secondary and higher education). Both competitive examinations can be prepared through three different channels: 1. University 2. Secondary education preparatory institutes (IPES - Instituts de préparation à l'enseignement du 2ème degré) 3. Higher teacher training colleges (Ecoles normales supérieures) 1. University: Students who have a 1st degree or a post-graduate teaching diploma (obtained after 3 or 4 years of study) can train for a teaching career. In order to do so they are required to sit the theoretical examinations of the CAPES (both written and oral) and where successful complete a 1-year period of pedagogical training in a regional pedagogical centre (CPR). They then sit the practical examination of the CAPES. Successful candidates become certificated teachers and are qualified to teach in any class of the 1st and 2nd cycles of secondary schools ("lycée" type). Students who hold a post-graduate diploma ("maîtrise") (4 years) may also prepare the highly selective competitive examination of the "agrégation". The "agrégation" is a one-part examination. Successful candidates then become part of the "agrégé" teaching staff. 2. IPES: At the end of the 1st university year students can decide to train for a career in teaching, whereupon they prepare the competitive entrance examination for the pedagogical institute of secondary teaching (IPES). This is not an institution as such but rather an organisation catering for students who have passed the entrance examination. The latter sign a 10-year teaching contract and are remunerated. They attend courses with other students but can benefit from private supervised tuition. They must obtain their 1st degree after 2 years study and are exempted from the written part of the theoretical CAPES, which they prepare during 1 year of further study after their 1st degree. Successful candidates like other "non-ipésien" students, attend a 1-year pedagogical training course in a CPR and sit the practical part of the CAPES examination. The IPES students can also prepare the "agrégation" once they have completed the theoretical part of the CAPES, but must beforehand receive special authorization from the university teachers concerned in order to keep their remuneration. 3. Higher Teaching Training Institutes (Ecoles normales supérieures): There are four schools of this type: Ulm and Sévres (men), Sévres and Fontenay-aux-Roses (women). Recruitment of students is done through competitive entrance examination. To sit this examination, students require to have the "baccalauréat" and completed 2 years of preparation. Preparation for the competitive entrance examination for recruitment to teaching lasts 3 to 4 years. The standard of exam is similar to the

Teachers	Place of Training	Length of Study (in years)	Other Information
Technical sections in "Lycées" (2nd cycle)			exam "ipésiens" sit. The majority of "normaliens" of Ulm and Sèvres train for posts in higher education and scientific research while those of Saint Cloud and Fontenay train for careers in secondary education.
A. Non vocational subjects	ENSET (higher technical teaching training institute of Cachan)	5-6	Teacher's duties are organised on the basis of specialization and teachers are recruited, like their colleagues in classical and modern secondary schools, from among holders of the "agrégation", or the CAPET equivalent to the CAPES for technical education. Students can prepare the CAPET either at university (whether or not they are "pésiens") in which case pedagogical training takes place in a CPR (see above training of 2nd cycle secondary teachers) or in the higher technical teacher's training institute (ENSET) where admission is by competitive examination. In order to sit this examination candidates are required to be between 18 and 23 years old on the 1st day of January of the year the examination is taken and must hold a "baccalauréat" or an equivalent certificate plus 2 years in the preparatory classes of the "grandes écoles". As admission to the competitive examination is considered equivalent to the university diploma of literary studies (DUEL) and the diploma of scientific studies (DUES), the 1st 2 years are devoted to the preparation of the "licence" and the "maîtrise" (post-graduate diploma) and to the theoretical part of the CAPET. They are exempted from the written examination. The 3rd year of the course is devoted to a period of teacher training, which takes place in the ENSET, to the preparation of the practical part of the CAPET and to studies or preparatory works for entry to 4th year. Fourth year is devoted to preparation of "agrégation". Teachers of these subjects can have one of the following three types of training: (a) a regular university training in appropriate subjects with or without attendance at the pedagogical institutes of secondary education (IPES); (b) university level training provided in the higher technical teacher training school (ENSET) in the relevant sections; (c) university level training as engineer. Holders of a degree can prepare the technical secondary teaching proficiency certificate (CAPET). Those who have a post-graduate diploma can prepare the "agrégation".
B. Theoretical technical subjects		5-6	

Teachers	Place of Training	Length of Study (in years)	Other Information
C. Practical vocational subjects		1	Assistant Technical Teachers (PTA) These teachers are recruited through a competitive entrance examination from among people in employment or the certificated teaching staff of CET. After the examination they complete a 1-year training period similar to that of the CPR, held in a centre affiliated with the ENSET. There are industrial and commercial PTA with sections of social studies and domestic economy. Teachers in agricultural secondary schools must hold a proficiency certificate which entitles them to teach therein. The certificate is equivalent to the CAPES and the CAPET and can be prepared in 1 year. The competitive entrance examination is open to holders of a teaching certificate or a diploma in engineering or general agronomy. The examination includes four options: physics, organic chemistry and soil studies, animal biology, biology of plants, rural economy and sociology. Teachers in these institutions can be divided into: (A) Teachers of general subjects (PEG) (B) Teachers of theoretical techniques (PETT) (industrial drawing, industrial design, commercial subjects and domestic sciences) (C) Assistant technical teachers (PTA) In each of these categories candidates are selected through a competitive entrance examination. Enrolment requirements for the entrance examination are as follows: Teachers of general subjects: Candidate must be aged between 20 and 35 and have passed entrance examination to the higher technical teacher training institute (ENSET), or be a qualified primary teacher not over 40, or hold the 1st year certificate of the DUEL or the DUES or equivalent diploma, and pass a competitive entrance examination of a national teacher training apprenticeship school (see below). Teachers of theoretical techniques: Recruitment in ENNA is by competitive entrance examination open to candidates who hold one of the following diplomas: university diploma in technology (DUT), higher technician's certificate (2 years after completion of 2nd cycle secondary education) or technical "baccalauréat" or equivalent certificate. Candidates who have either 2 years practical professional experience in their speciality or 2 years of service as an assistant teacher in a state institution of technical education and who, in addition, have either a "baccalauréat" or an equivalent certificate can also sit entrance examination. Assistant technical teachers: Candidates must be aged between 23 and 45 and have 5 years experience in employment in their speciality; exceptions may be made in favour of candidates who hold certain particular certificates. No educational or professional qualifications are required. Once the national entrance examination has been passed candidates undergo a 1-year period of teacher training as probationary teachers either in an ENNA or under the guidance of the principal or teachers of these schools. The organisation of the training course in the ENNA is related
Agricultural secondary schools ("lycées")	Training centre of Dijon	4-5	
CET (Colleges of technical education)	ENNA (National teacher training apprenticeship centre)		
A. Non-vocational subjects		4	
B. Theoretical technical subjects		4	
C. Practical vocational subjects		1	

Teachers	Place of Training	Length of Study (in years)	Other Information
D. Artistic and special subjects	CPR	5-6	to the particular type of education given in the CET. Training includes instruction in general culture of which one part is common to all trainees and the other varies according to the categories (PEG, PETT or PTA), specific instruction in the trainee's speciality, pedagogic instruction of a general nature centered on psycho-pedagogy, sociology and psychotechniques in addition to which students are also given a more detailed training in the teaching techniques of the subject they propose to teach. The course also includes periods of training done in the CET at the end of which a certificate of teaching proficiency in CET is awarded. This training concerns teachers of singing, drawing and educational handwork. Future teachers are required to prepare a teacher's certificate in schools which correspond to their speciality, followed by a period of teacher training in the CPR, after which a competitive examination is taken enabling them to become fully qualified teachers. Uncertificated teachers are classed as auxiliary teachers. Training of these teachers depends on level at which they will teach. (i) Teachers of physical education and sport in primary schools: These are primary teachers who have received special training during their course in teacher training schools. (ii) Teachers of physical education and sport in CES-CEG: Specialized primary teachers are in charge of this field of activity on a full-time basis. (iii) Teachers of physical education and sport in the "lycées": This is generally the task of qualified teachers of physical education and sport who have both parts of the teaching qualification in physical education and sport (CAPEPS). After the "baccalauréat" students are recruited through a competitive entrance examination. In the 1st year training takes place in regional centres or regional institutes of physical education and sport. The 2nd part of the teaching qualification is prepared in 3 years in the higher teacher training school of physical education and sport (ENSEP). A second category of teachers is made up of teachers qualified in physical education and sport. They are recruited after the BEPC and undergo a 2-year teacher training and technical course in certain regional centres. Replacement teachers (teachers or supply teachers) generally are required to have an official qualification: 1st part of teaching qualification teacher's certificate or national certificate in physical education.
E. Physical education and sport	Teacher training schools		
	CREPS and regional institutes of physical education and sport and ENSEP	4	
	CREPS and INS	2	

Teachers	Place of Training	Length of Study (in years)	Other Information
Higher Education Universities	Universities and "grandes écoles"		The entire teaching staff in university establishments is employed by the State and their salaries are drawn from the Ministry of Education budget. The staff includes professors, senior lecturers and lecturers, supervisors of practical classes and assistants. The new reform law in higher education ("loi d'orientation") adopted in 1968 will however bring about gradual changes in the teaching staff recruitment methods. Proposals for creating a single body of teachers headed by the professor down to the assistant have been put forward. Professors: They are appointed by decree of the President of the Republic on recommendation by the faculty council and the universities' consultative committee. (a) Titular professors are recruited from among the lecturers and lecturers with an "agrégation" who have been in employment for at least 2 years. (b) Associate professors are specialists who are not of French nationality or distinguished French personalities who do not however possess the required academic qualifications. Senior lecturers: The level of specializations required by senior lecturers varies with each faculty. In the faculties of law and economic science, of medicine and of pharmacy senior lecturers must have passed the "agrégation". The "agrégation" is a competitive recruitment examination for top level teaching posts in the three faculties mentioned above and is organized by them. In the faculties of arts and human science and the faculty of science a senior lecturer must hold a State doctorate and figure on the higher education teaching proficiency list, known as the "restricted list". Assistant lecturers: In the law and economic science faculties the assistant lecturers hold doctorate in law or economic science and politics and have for a minimum period of 2 years filled posts as assistants or have been supervisors of practical classes or have done 3 hours teaching per week and are registered on a national teaching proficiency list. In the faculties of science, arts and human sciences, they can hold a doctorate in arts, science, engineering, or have an "agrégation" or a 3rd cycle doctorate or are assistants who have been employed for a minimum of 3 years and are registered on a national proficiency list. Supervisors of practical classes: In the faculties of pharmacy and medicine, they hold doctorates in pharmacy, science, medicine or are qualified assistants who have been employed as assistants for at least 3 years and are registered on a national proficiency list.

Teachers	Place of Training	Length of Study (in years)	Other Information
Écoles d'ingénieurs et autres "grandes écoles" (Schools of engineering and other "grandes écoles") Instituts universitaires de technologie (IUT) (University Institutes of Technology - IUT) Higher non-university type education (other than IUT)			Assistants: In the law and economic science faculties assistants do not have any official status but in practice they hold a 1st degree in law or economic science. In the faculties of medicine they must be doctors of medicine. In the faculty of science they require to be graduates in science and holders of a doctor of engineering diploma or be engineers with a qualification enabling them to prepare a doctor of engineering diploma. In practice, however, the post of assistant is also open to secondary teachers with the "agrégation" to holders of a State doctorate, to holders of a 3rd cycle doctorate, to graduates who also hold either qualifications in engineering or a certificate of higher studies (DES) or an advanced studies certificate (DEA) or a secondary teachers certificate. In the arts and human science faculties they must hold an arts 1st degree plus a higher studies certificate (DES) or equivalent or higher qualifications or be graduates from the national school of modern oriental languages, the practical school of higher studies or have a university arts doctorate. In practice, however, an assistant's post may also be assigned to secondary teachers who have passed the "agrégation". The teaching staff is made up of a core of university teaching staff but also includes a number of specialists and technicians especially in schools of engineering. The teaching staff includes either civil servants who are part of staff in universities or other teaching institutions, or candidates chosen for their ability in any particular field of study. The teaching staff is composed mainly of specialists and technicians and also of members of university teaching staff.

Teachers	Place of Training	Length of Study (in years)	Other Information
			<u>Training of teachers in private education</u> This type of education consists of private secular instruction and, more commonly, private catholic instruction (known as "enseignement libre"). <u>Primary education:</u> Before 1959 a great proportion of the teaching staff in these private institutions held only an upper primary certificate. Since then the possibility of a legal contract between these private establishments and the State educational system has been introduced. Teachers are now obliged to take the certificate of teaching proficiency (CAP) examination. Teachers are allowed 3 years to prepare the certificate for which courses are organised on a national or local scale. There are also correspondence courses. Teachers over 40, however, can be exempt from the written papers of the CAP. All new teachers in a private establishment under contract are obliged to have the full CAP. <u>Secondary education:</u> By the law of 31st December, 1959, teachers under contract (simple or associateship) are required to have the same qualifications as teachers in secondary State schools, namely a teaching diploma. New teachers are recruited only if they have this qualification. Religious IPES have been created as from 1964. Concerning technical and agricultural education, qualifications demanded have always been much the same in either the private or State system. The decree of 12th April, 1965, offers teachers in private institutions the possibility of taking the competitive examination for recruitment to State educational system in which case they enrol on a special list.

BIBLIOGRAPHY

- Encyclopédie pratique de l'enseignement en France.
- L'organisation de l'enseignement en France, 1970 - Institut pédagogique national. Série cahiers de documentation.
- Que ferez-vous de vos enfants? Edition 1969-70 - Ministère de l'Education nationale.
- Orientation après la classe de 3ème - 1969. Bureau universitaire de statistique et de documentation scolaire et professionnelle.
- Le premier cycle: horaires, programmes, constructions. Edition 1966. Mise à jour 1970. Institut pédagogique national.
- Le deuxième cycle long: horaires, programmes, constructions, 1969. Institut pédagogique national.
- Les débouchés du baccalauréat, 1969 - Ministère de l'Education nationale.
- Que faire sans le baccalauréat. S.D. Office national d'information sur les enseignements et les professions.
- Orientation après le baccalauréat, 1970. Bureau universitaire de statistique et de documentation scolaire et professionnelle.
- Les Instituts universitaires de technologie (Bernard M.Y.), 1970 - Dunod.
- The education, training and functions of technicians: France, 1967, OECD.
- Liste des diplômés institutés sur le plan national et sanctionnant une formation professionnelle, 1970 - Ministère de l'Education nationale.
- Les enseignants du second degré: leur situation dans l'établissement scolaire, 1969 - Dunod.
- Les professeurs du second degré (Vincent G.), 1967, Armand Colin.
- Personnels de l'Education nationale (série mise à jour en 1970), Institut pédagogique national.
- The Recruitment and Training of University Teacher, 1967, IAUPL.
- Study on teachers: France/Ireland, 1969, OECD.
- Rapport sur les conditions de développement, de recrutement, de fonctionnement et de localisation des grandes écoles en France, 1964 - La Documentation française.
- Organisation et programmes des différentes facultés. Série mise à jour en 1970. Institut pédagogique national.

La réforme de l'enseignement: août 1963 - mars 1966. Ministère de l'Education nationale.

La réforme de l'enseignement dans les pays de la CEE. (Reguzzoni, M.), 1966, Aubier-Montaigne.

Educational policy and planning - France - Reviews of national policies for education - OECD, 1971.

Schools systems: a guide - 1965 and 1970 - Council of Europe.

Schools in Europe - vol. II, Part A and B (Schultz, W.) 1969 - Verlag Julius Beltz.

World Survey of Education - Vol. II, III, IV - 1960-1967 - UNESCO.

Bulletin officiel de l'Education nationale (hebdomadaire) - Ministère de l'Education nationale.

Etudes et Documents, numéros 15 et 16. Ministère de l'Education nationale.

L'Education (hebdomadaire) - Institut pédagogique national.

Avenir (monthly). Bureau universitaire de statistique et de documentation scolaire et professionnelle.

Informations statistiques. Ministère de l'Education nationale - Service central des statistiques et de la conjoncture.

Statistiques des enseignements - Ministère de l'Education nationale - Service central des statistiques et de la conjoncture.

For the latest years, provisional statistical documents from the Ministère de l'Education nationale - Service central des statistiques et de la conjoncture.

NORWAY

(May 1971)

Compulsory schooling: 7 years, from the age of 7 to 14
(in fact 9 years in most of the municipalities)

NORWAY

78

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
1. <u>Pre-primary education</u> 1.1. Barnehauger (Nursery school)	1-5	-	-	There are generally 2 groups a day = part time	Some nursery schools are set up on a private basis and on municipal initiative. As a rule they receive public aid and are subject to public contract. There are groups for children under the age of 3 years and other groups for children aged 3-6 years. The nursery school comes under the Ministry of Family and Consumer Affairs.	Pre-primary	-
2. <u>Primary and 1st cycle secondary education</u> 2.1. Old system 2.1.1. Folkeskole (Primary school)	7	To be 7 years old. A child may begin a year later or start earlier, provided he has reached the age of 6 before 1st July.	No examination	Full time	The majority of primary schools are State-run establishments. Local education authorities exercise a certain amount of freedom in the drawing up of syllabuses. As a general rule teachers too enjoy freedom of choice concerning their teaching methods. These schools are being phased out and are gradually being incorporated in the new "grunnskole" (9-year basic compulsory school).	Primary	1-7
2.1.2. Framhaldsskole (Primary continuation school)	2	Finished 7 years in the "folkeskole"	No examination	Full time	When the introduction of the 9-year "grunnskole" is completed the "framhaldsskole" will disappear.	General secondary (b)	8-9
2.1.3. Realskole (Intermediate school)	2 or 3	Finished 7 years in the "folkeskole"	Realskole-eksamen qualifies for admission to certain professional and technical colleges and the "gymnasium"	Full time	All students must pass a public examination in the main fields, after 2 years. Thereafter the pupil may enter the "gymnasium" or continue a 3rd year in the "realskole". It is possible to pass the "realskole" with only one language, English. (Usually the students are also taught German). In some districts there exists an intensive course leading to a complete "Realskole-eksamen" in 2 years. When the introduction of the 9-year "grunnskole" is completed, the "realskole" will disappear.	General secondary (a) or (b)	8-9/10

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
2.2. New system - 9-årig Grunnskole (9-year basic comprehensive school)				Full time	Compulsory education which has been extended to 9 years will be enforced by all local authorities about 1975. A new system has been introduced to replace the 7-year folkskole, the framhaldskole and the realskole. By 1969 about 85 per cent of the municipalities had introduced the new 9-årig grunnskole, consisting of "barneskolen" and "ungdomsskolen". The local authorities may choose between two systems, 6 + 5 years or 7 + 2 years, of which the former is the more popular.		
2.2.1. Barneskole (lower level of comprehensive school)	6 or 7	Same conditions as for folkskole (see 2.1.1.)	No examination	Full time	These schools replace the "folkskole". At some schools there are test-courses for 6-year old children to ascertain if they are prepared to start at the "barneskole".	Primary	1-6 or 1-7
2.2.2. Ungdomsskole (upper level of comprehensive school)	3 or 2 + 1	Finished Barneskole	Examination after 9 years in two fields. During the course standardized tests are held and the marks obtained at these tests form the basis for the evaluation in the fields where no State examinations are held. The certificate obtained gives access to further education (technical schools, vocational training, etc.). To attend the gymnasium it will be necessary for the pupil to select German as a second language (English is compulsory).	Full time	The classes remain unstreamed with elective courses in various subjects, five lessons a week in the 8th year and 12 in the 9th. The teachers have a large degree of freedom in selecting teaching methods. During the 9th year, the pupils will work in companies for a limited period, in order to come to grips with a "working life". This "ungdomsskole" will replace "framhaldskole" (primary continuation school) and "realskole" (intermediate school). The 10th year of the "ungdomsskole" may be introduced by a local authority decision. By 1969 this last year had been introduced in more than 30 per cent of the municipalities. In the 10th year, there are 16 optional subjects with possibility of some vocational training.	General secondary (a)	7-9/10 or 8-9/10

NORWAY

80

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
3. General secondary education - short course							
3.1. Folkehøgskoler (Folk high schools) (Boarding schools)	1-2	Finish compulsory education Age: 17	No examination. Leaving certificate stating behaviour and fields of study.	Full time	The Folk high schools are developed along the same lines as the Danish "Folkehøgskole". The schools are mostly private, receiving State aid. There are different sections and also courses of shorter duration than 1 year. The schools provide general education and are mostly attended by the rural population.	General secondary (b) (complementary)	-
4. 2nd cycle general secondary education							
4.1. Gymnasium (2nd cycle secondary school leading to higher education)	3	New system: completion of "gymnasiale" and have studied two languages. Old system: "realhøjskole" with two languages or enter directly after only 2 years in the "realhøjskole". (Applicants with other qualifications must sit an entrance examination).	"Examen Artium" (2nd cycle secondary leaving certificate) giving access to higher education. For some fields of study at university level, certain sections of the "gymnasium" are required. Students from another section must then sit an entrance examination or follow pre-courses. Students attending "gymnasium" which are not recognised (privatiseret) must sit an exam in every subject (written or oral) to obtain the "examen artium" while other students only have an examination in certain fields.	Full time	The gymnasium is divided into several parallel sections: "Reallinje" - (science) "Naturfaglinje" - (biology and chemistry) "Engelsklinje" - (English) "Sosiallinje" - (social sciences) "Norrønlige" - (old Norse) "Latinlinje" - (Latin, with the additional possibility to study Greek) In addition to this, there is a commercial section at some schools (Økonomisk gymnas) which is equivalent to the education offered at the "handelsgymnasium" (commercial secondary school). The majority opt for the Science or the English section. There exists also a special "gymnasium" called "landsgymnas" which is a 4-year regional secondary school based on 7 years in primary and a 6-month continuation course. A new law states that the "examen artium" can gradually be built up by sitting the necessary examination over a longer period of time.	General secondary (a)	10-12 or 11-13

NORWAY

81

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
4.2. Handelsgymnasium (Commercial secondary school)	3	See 3.1.	See 3.1.	Full time	The education given here is of general nature, thus giving access to higher education at university. In addition to the regular courses, commercial and secretarial courses for students are provided. (See 6.3.3. and 6.3.4.).	General secondary (a)	10-12 or 11-13
5. <u>Besetlsskoler</u> <u>for høyskole</u> <u>elever</u>							
5.1. Grunnskole (Basic comprehensive school: primary and 1st cycle secondary)	7 + 2 or 6 + 3	7 years old	Examination	Full time	Some special schools are private receiving State aid. There are also special classes at some ordinary schools.	6 or 7 years Special primary 3 or 2 years Special general secondary (a)	1-6 or 7 7-8/9
5.2. Framhaldsskoler (Primary continuation schools)	1, 2 or 3	Completion of 7 years of primary school (the old "folkeskole")	No examination	Full time	This type of school will disappear when the 9-year Grunnskole is fully introduced.	Special general secondary (b)	8-9 or 8-10
6. <u>Technical and vocational education</u> <u>(Fag- og yrkesskoler)</u>							
6.1. Yrkesskoler for handverk og industri (Vocational schools of handicraft and industry)					Experiments are being carried out with a view to combining vocational training (yrkesskoler) and general education (gymnas).		
6.1.1. Verkstedsskoler (Workshop schools)	3-3	Completion of compulsory school	Certificates are awarded allowing a reduction of between 12-26 months in apprenticeship.	Full time	Most of the courses last 1 year but they are increasingly being extended to 2 years. The "verkstedsskole" is usually attended before starting as an apprentice.	Technical secondary (b)	10-11 or 12 or 13 or variable

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
6.1.2. Bedriftsskoler (Vocational industrial school)	1-3	Finished compulsory school	Upon passing "fullstendig verkstedskole" (completed course) the pupil becomes a skilled worker or receives the journeyman's certificate without apprenticeship. See 6.1.1.	Full time	There are different sections for bakers, electricians, iron and metal workers, bricklayers, etc. There are also courses for technical assistants and a special foreman-school of 1 year. Some schools are private, receiving State aid. The workshop school may also serve as a pre-course to "tekniske fagskole" and "tekniske skoler" - 3 years. These schools run courses similar to those of the "verkstedskole".	Technical secondary (b)	10-11, 12 or 13 or variable
6.1.3. Laerlingskoler (Schools for apprentices)	3-4	Finished compulsory school	An examination held in the compulsory fields. A practice test must also be passed before the certificate of skilled worker or journeyman is obtained.	Part time	This type of school has a decreasing importance as the number of "verkstedskoler" is increasing. Courses are usually held 1 day a week. Pupils who have attended courses from the "verkstedskole" can usually shorten their period of study at the "laerlingskole". The 4th year of the ordinary courses leads to "handverksmester" (foreman). All apprentices in crafts and industry must attend an apprentice school if there is one in the neighbourhood, unless they have already completed the syllabus of such a school by some other means.	Technical secondary (b)	10-12 or 13 or variable
6.1.4. Elementaer-tekniske skoler (Elementary technical schools)	1	Completion of compulsory school. Age: 17	Leaving certificate	Full time	There are different sections, the instruction being both theoretical and practical. Usually the students have several years of practical experience. Special 2-year evening courses are also offered.	Technical secondary (b)	Variable
6.1.5. Tekniske fagskoler (Technical trade schools)	2	Completion of compulsory school. Age: 16 Entrance examination.	Having passed examination the title "tekniker" (technician) is obtained	Full time	There are different sections, about half the time is spent in practical training. Usually the students have some years of practical experience. Revision of the school is planned, to bring it in line with the 9-year "grunnskole". The number of sections will be increased, practical experience will be required before entrance and besides the ordinary 2-year course an evening course of 4 years is planned. This new "tekniske fagskole" is planned.	Technical secondary (b)	10-11

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.O. Classification	
						Type of Education (7)	Years of Study (8)
6.1.6. Huseflids-og heimverkskoler (Schools of handicrafts and trade)	Max. duration of the course 10 months	Completion of compulsory school	Pupils can subsequently continue their education at more advanced schools	Full time	will replace both the existing one and the "elementaer tekniske skoler". The main purpose for these schools is to give the youth of the country-side practical training for their future work in agriculture, forestry or fishing. There are also special courses for women. Most of the schools started as private schools but have since obtained state grants.	Technical secondary (b)	10
6.1.7. Handverks-og Kunstindustriskoler (Schools of applied art)	3-4	Completion of compulsory school	Leaving certificate	Full time	These schools usually offer a basic 1-year course followed by a specialized 2- or 3-year course.	Technical secondary (b)	10-12, 13 or variable
6.2. Fagskoler for Landbruket (Agricultural Education)			The different certificates give access to corresponding courses at the State College of Agriculture		The courses are of variable duration and are divided into theoretical and practical courses. The schools are under the supervision of the Ministry of Agriculture.		
6.2.1. Landbruks-skoler (Agricultural schools)	1-2	Completion of compulsory school and 1 year of practical experience Age: 18	Leaving certificate (see 6.2.)	Full time	There are different courses. At some schools, new courses are introduced on an experimental basis.	Technical secondary (b)	10-11
6.2.2. Gartneri-og Hagebrukskoler (Horticultural schools)	1-1½	Completion of compulsory school. Variable requirements of practical experience (never less than 2½ years) and of age (15 to 18 years) for different schools.	Leaving certificate (see 6.2.)	Full time		Technical secondary (b)	10
6.2.3. Skogskoler (Schools of forestry)	1	Completion of compulsory school, 1½ years of practical experience Age: 18	Leaving certificate (see 6.2.)	Full time	There is also a school for the education of skilled forestry workers, offering courses of 10-12 weeks duration.	Technical secondary (b)	10

NORWAY

254

Type of Education or Institution (a)	Length of Study (in years) (b)	Entrance Requirements (c)	Certificate (d)	Full/Part Time (e)	Other Information (f)	OECD Classification	
						Type of Education (g)	Year of Study (h)
6.2.4. Meieriskoler (Dairy schools)	2-3½	Completion of compulsory school Age 10	Leaving certificate (see 6.2.)	Full time	Two courses are offered for dairy-women and one for dairy technicians.	Technical secondary (b)	10-11 or 12
6.3. Commercial education (Herkantile skoler)							
6.3.1. Yrkeskole for Handels-og Kontorfag (Vocational school of commerce)	1	Completion of compulsory school	Having passed the examination, the student meets the theoretical requirements to obtain "handelsbrev" (commercial letter) which is necessary to establish an independent trade	Full time	There is also a 2 or 3 year evening course. A special continuation course in marketing of 1 year full-time or 2 years part-time is also available. The basic course (1 year) offers various options.	Technical secondary (b)	10
6.3.2. Handels-skoler (Commercial schools)	1	Completion of compulsory school	Leaving certificate	Full time	There is also a shorter course of half a year "handelskolene" offering an education almost equal to "yrkeskole for handels-og kontorfag". A revision of commercial education is planned, and these two different schools may be united.	Technical secondary (b)	10
6.3.3. Fagkurs for student (Commercial course for students)	1	Examen artium	Examination	Full time	These courses are usually provided by the "handelslyseum" or "handels-skoler". Students from sections other than the commercial one who wish to qualify for the Norwegian School of Economics and Business Administration usually follow such a course. From 1970/71 a 1-year "Economic College" has been offered at Oslo Handelslyseum. This course also requires "examen artium". Plans exist for prolonging this course by 1 year.	Technical secondary (a)	13
6.3.4. Sekretar-skole for student (Secretarial course for students)	1	Examen artium	Examination	Full time	These courses are usually established by the "handelslyseum" or the "handels-skoler".	Technical secondary (b)	13

NORWAY

Type of Occupation or Institution (1)	Length of Study (in years) (2)	Exclusion Requirements (3)	Certificate (4)	Full Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (a)	Years of Study (b)
6.4. Domestic science (Skoler for husstell s.v.)							
6.4.1. Fagskole i husstell (Schools of domestic science)	2 or 3	Completion of compulsory school. Age: 16 or at some schools 18 years	Leaving certificate giving access to various nursing schools	Full time	These schools provide both a domestic science course and also serve as a pre-course for other schools. There exist also schools for further domestic science education, "Husorvikarskoler", "Statens Kjokkensjefskoler" and "Statens skole for kosthold&konomeer".	Technical secondary (b)	10
6.5. Social medical education (Skoler for helsestell og sosialt arbeid)							
6.5.1. Hjelpepleier- skoler (Elementary school of nursing)	8 months	Having attended a domestic science school (1/2 or 1 year) Age: 18	Auxiliary nurse	Full time		Technical secondary (b)	10/11
6.5.2. Kontor&ster- skoler (Medical secretary school)	10 months	Completion of compulsory school	Medical secretary	Full time		Technical secondary (b)	10
6.5.3. Barnepleie- skoler (Schools of child nursing)	1/2 or 1 1/2	Domestic science school of 1/2 year Age: 18	Child nurse	Full time		Technical secondary (b)	11/12
6.5.4. Tannpleie- kurs (Course for dental nurse)	1	Compulsory school	Dentist's nurse	Full time		Technical secondary (b)	10
6.6. Hotel schools							
6.6.1. Norsk Hotel- fagskole (School for hotel service)	3 months	Compulsory school and 2 years of practical experience	Cook or waiter	Full time	There exists also an advanced course of 5 months requiring 4 years of practical experience.	Technical secondary (b)	-

NORWAY

86

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
6.7. Meritime studies (Maritime skoler)							
6.7.1. Navigations-skoler (Navigation schools)	1-4	Compulsory school. 30 months of practical experience at sea is necessary to obtain any certificate.	There are independent courses at different levels, and different certificates are obtained (mate's examination, master's examination, etc.)	Full time	A revision of maritime studies is planned. Also a course of 3 months exists for 15-year old boys. 1-year course for radio telegraphists is also offered.	Technical secondary (b)	Variable
6.7.2. Maskinist-skoler (Schools for maritime engineers)	3-3	Compulsory school. 18 months of practical experience is necessary to obtain any certificate.	Independent courses at different levels leading to different certificates	Full time	There are also two fishers' courses each of 10 months duration.	Technical secondary (b)	Variable
6.7.3. Kokk-og Stuertakoler (Schools for cooks and stewards)	1-3	Compulsory school and 2 years of practical experience Age 17	Cook or steward certificate provided necessary practical experience at sea has been completed	Full time	The school offers three courses: a cook course, a basic course, and a higher steward course. Each course lasts 1 year.	Technical secondary (b)	Variable
6.7.4. Skipsselek-trikerakole (School for ship electricians)	1	Compulsory school and practical experience is necessary to obtain a certificate. Examination from various technical schools may replace part of the practical experience required.	Certificate as a ship electrician	Full time	There is also a 3-month course available for those with a diploma from a workshop school or various technical schools.	Technical secondary (b)	10
6.7.5. Fiskerfag-skole (Fishery schools)	1/2 or 1	Compulsory school and 1 or 2 years of practical experience after the age of 15 years is reached		Full time	Instruction is arranged in special branches for masters of fishing vessels, engineers and cooks.	Technical secondary (b)	10

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	ISCED Classification	
						Type of Education (7)	Years of Study (8)
7. Teacher training							
7.1. Alminnelige lærerakademi (Primary teachers' training colleges - general subjects)	4	Compulsory school and entrance examination Age: 18 years "Examen artium" Age: 19 years	Teachers certificate to teach in the "grundskole". This certificate gives access also to various specialized primary teachers' training colleges and to the State college for secondary teachers.	Full time	There are two sections, one general and one English. At some colleges experimental courses of 3 years instead of 2 are given for holders of "examen artium". The colleges are all public, except for the newly established "Hørek lærerakademi".	Higher non-university (education)	10-13 15-14
7.2. Spesielt-og faglærerakademi (Specialized primary teachers' training colleges)	1 or 2	There are different entrance conditions according to the colleges: Journeyman's certificate, examen artium, teachers certificate, etc.		Full time	There are teachers colleges for: - Physical education - Handicrafts & drawing - Domestic science - Music - Arts & crafts and a College for primary teachers of handicapped children ("Statens spesialiseringskole").	Higher non-university (education)	Variable
7.3. Norges idrettshøgskole (College of physical education)	2	"Examen artium" or equivalent and an entrance test	Examination	Full time	Besides the main course of 2 years, other specialized courses are offered.	Higher non-university (education)	
8. Higher vocational and technical education							
8.1. Artistic education							
8.1.1. Statens Kunstakademi (The State Academy of Fine Arts)	3	Entrance examination Age: 18	Leaving certificate	Full time	There are plans for prolonging the course by 1 year.	Higher non-university (fine arts)	
8.1.2. Musikkakademi (Musicians schools)	Variable	Compulsory school	Variable	Full time	There exists a variety of schools, private and public. The education given covers different levels. No statistics available.	Technical secondary (s/b) or Higher non-university (fine arts)	

NORWAY

101

Type of Education or Institution	Length of Study (in years)	Entrance Requirements	Technicals	Full Part Time	Other Information	O.E.C.D. Classification	
						Type of Education	Years of Study
0.1.3. Statens Teaterskole (The State College of Theatre)	3	Entrance examination Age: 17	Leaving certificate	Full time	A 2-year opera course is also offered.	Higher non-university (fine arts)	
0.2. Para-medical or social education							
0.2.1. Grunnskole i sykepleie (General schools of nursing)	3	Completion of 9-year "grunnskole" and 1 or 2 years at a folk high school or domestic science school. Old system: "vealskole" and domestic science school.	Diploma in nursing	Full time		Higher non-university (medical sciences)	
0.2.2. Spesial skoler i sykepleie (Specialized schools of nursing)	1	Finish the general school of nursing	Midwife, nurse of psychiatry, etc.	Full time		Higher non-university (medical sciences)	
0.2.3. Barnevernsskoler (Schools of child social welfare)	2	Compulsory school courses of domestic science and nursing, each of 3 year duration. 3 year of practical experience Age: 20 years	Certificate giving access to the Training College for teachers of handicapped children ("statens spesialiseringskolle")	Full time		Higher non-university (medical sciences)	
0.2.4. Fysioterapeutiskoler (Colleges of physiotherapy)	2 or 2 1/2	"Examen artium" or equivalent. Age: 19-25; 3 months practical experience.	Physiotherapist	Full time	There exists also a private institution "Hørsh Hensendiekskole A/S" giving education in the same fields.	Higher non-university (medical sciences)	
0.2.5. Laboratorie- og tekniker kurs (Course for laboratory technicians)	2	"Examen artium" or general nursery school. 6 months of practical experience Age: 18-30 years	Laboratory technician	Full time		Higher non-university (medical sciences)	

NORWAY

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.D. Classification	
						Type of Education (7)	Years of Study (8)
B.2.6. Reseptar-utdanning (training of pharmaceutical assistants)	3	"Examen artium"	Diploma entitling holder to work in a chemist's shop (but not to run one)	Full time	The course consists of 2 years of practical training and 1 year of theoretical studies.	Higher non-university (medical sciences)	
B.2.7. Sosialskoler (Schools of social services)	2½ or 3	"Examen artium" or equivalent. Age: 19	Sosionom (social worker)	Full time	Diakonhjemsnet (Lieskon institution) offers a course of 5½ years, combining the education of "sosionom" and "diakon" (social and ecclesiastical subjects).	Higher non-university (social sciences)	
B.3. Technical education							
B.3.1. Tekniske skoler (Technical schools) Main sections: building electricity machine chemistry heating and sanitary	3	New system: Completion of 9-years basic school. Old system: "Høyskole eksamen". 1 year of practical experience is also required but the "verksted-skole" may be considered equivalent.	These schools award the title of "ingeniør" (engineer), giving access to the Technical University	Full time	The schools may also run a preparatory 2-year course for those with "examen artium". Usually the applicants have practical experience of more than 1 year. There exist different sections at the various schools. "Ship technician's school" is only available for students with "examen artium". This course lasts 2 years.	Higher non-university (technology)	
B.3.2. Schou's Tekniske Institutt (Schou's Technical Institute)	2	"Examen artium"	This course is followed by 2 years of study in U.S.A. qualifying for the degree of "civil engineer" (university level).	Full time	This is a private institution.	Higher non-university (technology)	
B.4. Economic and commercial education							
B.4.1. Bedrifts-økonomisk Institutt (The Institute of Business Economics)	3	"Examen artium"	Examination	Full time	This is a private institution, which also offers a variety of full and part-time courses.	Higher non-university (social sciences)	

NORWAY

90

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
0.4.2. Høivorskolær (Auditing schools)	2 + 3	"Examen artium" (commercial section) or certificate from another section, supplemented by a commercial course of 1 year	There are two levels, "registrar" and "statistisk autoriseret revisor" of which the first level exam is taken after 2 years and the higher level after 3 more years	Full time	During the whole period of study, the student is trained in practical auditing. To audit in companies above a certain size, it is necessary to be "statistisk autoriseret revisor".	Higher non-university (social sciences)	
0.5. Other establishments							
0.5.1. Norsk Journalisthøjskole (The State School of Journalism)	1	"Examen artium" Practical experience is preferable Age: 18	Examination	Full time		Higher non-university (social sciences)	
0.5.2. Husholdningsskole (Nordisk) (Scandinavian College of Domestic Science)	2½	"Examen artium"	Nordisk Husholdningsskole (Candidate Domestic Science)	Full time	Limited places. This college offers courses at different places in Scandinavia. A course of domestic science is available at the University of Oslo.	Higher non-university (social sciences)	
0.5.3. Statens Bibliotekshøjskole (The State Library school)	3	"Examen artium"	Examination	Full time	The study period consists of 1 year practical work and 2 years of theoretical studies.	Higher non-university (humanities)	
0.5.4. Misjonshøjskolen i Stavanger (Stavanger Missionary school)	4½	"Examen artium"	After 4½ years at this school the student continues for 1½ years in the faculty of theology to become "cand. theol" (University level)	Full time		Higher non-university (humanities)	
0.5.5. Kistrikthøgskole (District colleges)	2	"Examen artium"	Examination	Full time	A few colleges were established in 1909. This type of "post-gymnasial" education is completely new. The idea is to offer independent courses in different fields. Having passed the examination the student may continue at a university. The "distrikthøgskole" must be regarded as a result of the re-structuring which is taking place in the system of higher education.	Higher non-university (social sciences)	

NORWAY

11

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	D.E.D. Classification	
						Type of Education (7)	Years of Study (8)
9. <u>Complementary education</u> 9.1. Folkehøyskolen (People's university)	Variable	15 years of age	Variable	Part time	There are courses offered all over the country. Languages, art, music, philosophy, etc., are typical subjects.	Complementary education	Variable
10. <u>Universities and equivalent institutions</u> 10.1. Universitetene i Oslo og Bergen (The Universities of Oslo and Bergen)		"Examen artium" or certificate from special military schools or equivalent foreign certificate	There are different diplomas at the 1st degree level (see below). At post-graduate level there are "licentiate" degrees (exceptional degrees in dentistry, medicine and veterinary medicine) and the degree of doctor.	Full time	The year is divided into 2 terms (semesters). There is a general preparatory examination in philosophy for all students at Norwegian universities (exceptional dentistry and pharmacy). The post-graduate degrees ("licentiate" and "doctorate") are conferred not on the basis of the successful completion of post-graduate courses, but on recommendation of independent research work presented in a thesis approved by the faculty or a Committee of experts. There are exact rules for the completion of a course leading to the award of a university degree. The possibility of electing different subjects gives a certain degree of flexibility. The various fields can be studied at different levels: Grundlag (Low Level) 2 Semesters Høiløsnag (Medium Level) 3 Semesters Avansert (High Level) 4 Semesters Magistergrad (High Level) 6 Semesters. To obtain the degree of "cand. mag." at the Faculty of Philosophy, for instance, the candidate must elect		

NORWAY

162

Type of Education or Institution (a)	Length of Study (in years) (b)	Entrance Requirements (c)	Examination (d)	Full/Part Time (e)	Other Information (f)	OECD Classification	
						Type of Education (1)	Years of Study (2)
10.1.1. Forberedelse prøver (General preparatory course)	3		Examination		two subjects at the level of "sellos-fag" and one subject at the level of "grunnfag" to become "cand. philol." he must elect one subject at each of the three levels "grunnfag", "sellos-fag" and "hovedfag". In "hovedfag" the student must do, in close co-operation with a professor, independent written work ("hovedfagsoppgave") which will be assessed.	Higher non-university (humanities)	
10.1.2. Teologi (Theology)	7		Cand. theol		This course is compulsory for all university studies, except pharmacy and dentistry. Some students leave the University after having passed this exam. No numerus clausus. There are special preparatory courses in Latin, Greek and Hebrew. Students from the Latin section are exempted from the Latin course and also the course in Greek if they have passed an exam in Greek in the "gymnasium". The main course is divided into two parts, each ending with an exam, and the final exam is usually taken after 6 years. The last year is spent at the "praktisk - teologisk seminar" to have a year of practical training as a priest.	Higher university (humanities)	
10.1.3. Jus (Law)	5		Cand-jur.		No numerus clausus. The study is divided into three parts, each ending with an examination. The percentage of student drop outs is important.	(law)	
10.1.4. Sosial- økonomi (Economics)	5		After 3 years: Exam, oecon" and after 2 more years "Cand. oecon"		No numerus clausus. A special preparatory exam in mathematics must be taken.	(social sciences)	

NORWAY

Type of Education or Institution	Length of Study (in years)	College Requirements	Degrees	Full/Part Time	Other Information	OECD Classification
(1)	(2)	(3)	(4)	(5)	(6)	(7)
10.1.5. Medicine (Medicine)	6	Students from other sections than the "medicinal" or "naturhistorisk" must sit a written examination in mathematics and physics	Cand. med. After 4-5 years "Cand. med." After 6-7 years "Cand. philol." After attendance at a "pedagogiske seminar" for half a year after the "Cand. med." or "Cand. philol." leads to the award of the degree of "adjuvnt" and "lektor" (teachers in secondary school). "Mag. Artium" is a degree for those who want to specialize in certain fields. The length of study required is 5-7 years.		Numerus clausus. There is a special preparatory course in latin. The course is divided into two parts, each ending with an exam. Having passed the exam there is 1 1/2 years "turstudieneste" (compulsory practical work for 1 1/2 years). Because of limited places, many Norwegians are studying abroad. No numerus clausus. There is a special preparatory course in latin. Also courses in "science of languages" and "phonetics" are obligatory.	Higher University (medical sciences)
10.1.6. Philology (Philology)	4-5 or 6-7					Humanities
10.1.7. Natural Sciences (Sciences)	3 1/2 or 5 1/2		Cand. mag. 3 1/2 yrs. Cand. real. 5 1/2 yrs. After 3 year attendance at "pedagogisk seminar" the degree of "adjuvnt" or "lektor" is obtained. (see Philology)		No numerus clausus. There is a special preparatory course in mathematics. There are different sections: - Mathematics - Physics - Chemistry - Geography & Geology - Biology	(pure science)

NORWAY

34

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Data Information (6)	OECD Classification	
						Type of Education (7)	Field of Study (8)
10.1.5. Actuarial (Actuary)	6		"Mag. scient." is a degree for those who want to specialize in certain fields. Length of study is 5-7 years. Cand. actuar.		No numerous clauses. After 24 years "Forsikringsstatistisk eksamen" is taken, giving access to work in insurance companies.	Higher University (social sciences)	
10.1.9. Farmaasi (Pharmacy)	5		Cand. pharm.		Numerous clauses. Studies are divided into three parts, each of 18 years duration, and each ending with an examination. Since 1969 the course has been re-organized and divided into two parts each lasting 24 years.	(medical sciences)	
10.1.10. Ontologi (Dentistry)	5 1/2	Examen Artium from sections other than "real-lingua" or "natur-lingua" means that the student must sit an entrance examination in mathematics and physics	Cand. odont.		Numerous clauses. Studies are divided into three parts, each ending with an examination.	(medical sciences)	
10.1.11. Pedagogisk (Pedagogy)	4	Practical experience and/or studies amounting to 3 years	Cand. paed. Mag. Artium 6-7 years.		Studies are divided into four parts, each ending with an examination.	(education)	
10.1.12. Psykologi (Psychology)	7 1/2		Cand. psychol. Mag. Artium 6 years.		Studies are divided into two parts, each ending with an examination.	(humanities)	
10.1.13. Etnologi (Ethnography)	6-7		Mag. Artium			(humanities)	
10.1.14. Sociologi (Sociology)	6		Mag. Artium			(social sciences)	

NORWAY

95

Type of Institution or Institution	Length of Study (in years)	Entrance Requirements	Examinations	Full/Part Time	Other Information	B.E.C. Classification	
(a)	(b)	(c)	(d)	(e)	(f)	Type of Education (1)	Years of Study (2)
10.1.15. State-vivenskap (Political science)	5-6		Cand. polit., or Mag. Artium			Higher university (social sciences) (others)	
10.1.16. Andre fag, Uppgitt (Others)							
10.2. Other university-level establishments							
10.2.1. Pedagogisk Seminar (Pedagogical Seminary)	6		Examination		This is a special institution providing pedagogical training for future secondary school teachers.	(Education)	
10.2.2. Det Teologiske Menighets-fakultet (The Independent Theological College)	7	Examen Artium	Cand. theol.		Must submit statistical data from this institution is included in "Teologi" in the University statistics. See "Teologi". This college has not received state aid till now, but has planned to apply for it in the coming year.	(Humanities)	
10.2.3. Norges Veterinærhøgskole (The State Veterinary College)	6	Examen Artium, 1 year practical experience in agriculture.	Veterinarian (Cand. med. vetp.)		Numerus clausus.	(agriculture)	
10.2.4. Norges Handelshøgskole (The Norwegian School of Business Administration)	5	Examen Artium or equivalent. Students from sections other than the commercial section must usually attend a "1-year" commercial course for students ("Student-faglinjen"). Some practical experience is preferable.	Eivildsøkonom (Business Economics)		Numerus clausus. The average length of studies is 36 or 4 years. A course of 1 or 12 years is available after the 1st degree is passed. "Handelsenerfag" to become a teacher at the "Handels-gymnasium". Besides the main course, there are different specialist courses.	(social sciences)	

NORWAY

50

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
10.2.5. Norges Tekniske Høgskole (The State Institute of Technology) Sections: - Architecture (Arkitektur) - Mining (Bergteknikk) - Building (Bygningsteknikk) - Elect. Engineering (Elektroteknikk) - Chemistry (Kjemi) - Mechanics (Maskinteknikk) - Applied physics (Teknisk fysikk)	4½-5	"Examen Artium" from the section of science or from biology/chemistry section, or equivalent foreign education. Students from technical schools are also admitted	Siviløkonomi (Civil Engineer) or Arkitekt (Architect)		Numerus clausus.	Higher university (technology or architecture)	
10.2.6. Norges Landbruks-høgskole (The State College of Agriculture) Sections: - Horticulture (Hagebruk) - Agriculture (Jordbruk) - Dairying (Meieridrift) - Forestry (Skogbruk) - Surveying (Jordmåling)	3	"Examen Artium" from the science or biology/chemistry section or education from a corresponding section at a school of agriculture. All applicants must have 2 years of practical experience. Time spent in a school of agriculture will be deducted from total length of practical experience required.	"Siviløkonom" (Agricultural engineer); "Hagebrukskandidat" or "Hortikulturatekt" (Horticultural engineer); "Meieringeniør" (Dairying engineer); "Forstkandidat" (Forestry engineer); "Jordmålingskandidat" (Surveying).		Numerus clausus.	Higher university (agriculture or technology, surveying)	
10.2.7. Statens Arkitektakole (The State College of Architecture)	5	"Examen Artium" from the science section and an entrance test	Arkitekt (Architect)		Numerus clausus.	Higher university (architecture)	

NORWAY

97

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
10.2.B. Norges Laererhøgskole (The State College for Secondary Teachers)	Variable	"Examen Artium" or "Laererprove" (Teacher's certificate) or equivalent. Applicants with "laererprove" are preferred.	See university	Full time	This college provides courses in certain subjects, leading to regular university-level 1st and 2nd degree: Subjects: Filologi (Philology) Realfag (Science) Pedagogikk (Pedagogy) Forberedende prøve (General preparatory course) For many statistics, data from "Norges Laererhøgskole" is often included in the corresponding University-statistics. The following institutions provide education in more or less specialized fields, and many of them are run privately. Statistical data is often difficult to obtain. 2-year courses for technicians of radio, film and T.V.	Higher university (humanities, pure sciences, education)	
11. Other Institutions						Variable	
11.1. Norsk Riksrådgivning (Norwegian Broadcasting)							
11.2. Bankakademiet (The Academy of Banking)							
11.3. Markedsføringskole (Marketing schools)							
11.4. Etat-skoler (Administration schools)							
- Jernbaneskoler (Railway)							
- Tollskoler (Customs)							
- Postskoler (Post)							
- Telegrafskoler (Telegraph)							
					Courses of 1 and 2 years are offered. Practical experience is required.		
					At these schools there are special courses of variable duration for people who work in the public services.		

NORWAY

98

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.5. Militære skoler (Military schools) - Haerens ingeniørskole (The Technical School of the Army) - Krigsskoler (Officers' School - the Army) - Luftkrigsskoler (Officers' School - the Air Force) - Sjøkrigsskoler (Officers' School - the Navy)					The military schools offer courses of variable duration, and at different levels. Some courses are well suited for civil employment.		
11.6. Brevskoler (Correspondence courses)					There are several schools offering a variety of courses.		
11.7. Misjonsskoler (Missionary schools)							

NORWAY

CLASSIFICATION OF HIGHER EDUCATION BY FIELDS OF STUDY

99

Fields of Study	O.E.C.D. Classification	Fields of Study	O.E.C.D. Classification
Universities of Oslo and Bergen and The State College for Teachers of Trondheim		Runologi (Runology)	Humanities
1. Historisk - filosofisk fakultet (Faculty of history and philosophy)		Russisk (Russian)	"
Allmenn litteraturkunnskap (General literature studies)	Humanities	Samfunnskunnskap (Social sciences)	Social science
Allmen språkvitenskap (General linguistic studies)	"	Samfunnsøkonomi (Economics)	Humanities
Arkeologi, klassisk (Archaeology, classical)	"	Sammenlikn. indo-europeisk språkvitenskap (Comparative studies of indo-European linguistics)	"
Arkeologi, nordisk (Archaeology, nordic)	"	Sammenlikn. politikk (Comparative studies in politics)	Social science
Bulgarsk (Bulgarian)	"	Semittisk språkvitenskap (Semitic linguistics)	Humanities
Engelsk (English)	"	Serbokroatisk (Serbo-Croat)	"
Etnografi (Ethnography)	"	Sosialantropologi (Social anthropology)	Social science
Etnologi (Ethnology)	"	Slavisk filologi (Slav philology)	Humanities
Finsk (Finnish)	Social science	Sosiologi (Sociology)	Social science
Finsk-ugrisk språkvitenskap (Finnish-ugric linguistics)	Humanities	Spansk (Spanish)	Humanities
Folkeminnevitenskap (Folklore)	"	Språkvitenskap med fonetikk (Linguistics with phonetics)	"
Fonetikk (Phonetics)	"	Statsvitenskap (Political science)	Social science
Fransk (French)	"	Teatervitenskap (Theatre science)	Humanities
Geografi (Geography)	"	Tsjekkisk (Czech)	"
Germanisk filologi (Germanic philology)	Social science	Tysk (German)	"
Gresk (Greek)	Humanities	2. Matematisk-naturvitenskapelige fakultet (Faculty of pure sciences)	
Gælisk (Gaelic)	"	Astronomi (Astronomy)	Pure science
Historie (History)	"	Biologi (Biology)	"
Idéhistorie (Political history)	"	Botanikk (Botany)	"
Indisk (Indian)	"	Fysikk (Physics)	"
Japansk (Japanese)	"	Geofysikk (Geophysics)	"
Keltisk språkvitenskap (Celtic linguistics)	"	Geografi (Geography)	"
Kinesisk (Chinese)	"	Geologi (Geology)	Social science
Kirkehistorie (Church history)	"	Kjemi (Chemistry)	Pure science
Kriminologi (Criminology)	Social science	Limnologi (Limnology)	"
Kristendoms-kunnskap (Christianity)	Humanities	Matematikk (Mathematics)	"
Kunsthistorie (History of fine arts)	"	Mekanikk (Mechanics)	"
Latin (Latin)	"	Statistikk (Statistics)	"
Litteraturhistorie (History of literature)	"	Zoologi (Zoology)	Social science
Logikk (Logic)	"		Pure science
Musikk (Music)	Fine arts		
Nederlandsk (Dutch)	Humanities		
Nordisk, særlig norsk, språk og litteratur (Scandinavian, especially Norwegian, language and literature)	"		
Nordisk språkvitenskap (Scandinavian linguistics)	"		
Norrøn filologi (Nordic philology)	"		
Pedagogikk (Pedagogy)	Education		
Polak (Polish)	Humanities		
Psykologi (Psychology)	"		
Religionshistorie (History of religion)	"		
Rettshistorie (History of law)	"		
Romansk filologi (Romanic philology)	"		

NORWAY

TEACHER'S TRAINING

100

Teachers	Place of Training	Length of Study (in years)	Other Information
1. Barneheger (Nursery schools)	Barnevernsskoler (Child welfare training schools)	2	To enter the "barnevernsskole" the candidate must have finished compulsory school, attended courses of domestic science and nursing, each of 1 year duration and have 1 year of practical experience. The age limit is 20 years and most of the applicants admitted have their "examen artium". The examination gives access to the Training College for Teachers of children in special classes. ("Statens Spesiallaererskole").
2. 9-årig Grunnskole (9-year basic comprehensive school)	Alminnelige Laererskoler (Primary teachers' training colleges)	2, 3, 4	The 4-year course is available for candidates with the "Høyskole certificate". Here there is an entrance examination and the student must have reached the age of 17. The 2-year course is offered to students with "examen artium". The age limit is 19 years. Usually there are two sections, a general and an English one. For the latter "examen artium" from the English section is usually required - and the English course gives competence for teaching English in the "Grunnskole". At some schools an experiment is in progress with a 3-year class, based on "examen artium" and age 18. In the future this will replace the teachers' training.
- Special subjects	Special og faglærerskoler (Specialized primary teachers' training college)		The teacher's certificate gives access to special courses. Usually these courses are of 1-year's duration; the main subjects taught are: Handicraft (1-year course, or a course of two summer terms); Physical Education (The State College for Physical Education); Courses for handicapped children and retarded children; Domestic Science; Handicraft & Drawing; Music; Arts & Crafts. The primary teachers' training colleges are all public except for the newly established "Horsk Laererkademi".

NORWAY

TEACHER'S TRAINING

101

Teachers	Place of Training	Length of Study (in years)	Other Information
2.2. Ungdomsskoler (Upper level of comprehensive school)	Laererskoler (Primary teachers' training colleges) Spesiallaererskoler (Specialized teachers' training colleges) Norges Laererhøgskole (State college for secondary teachers) Universitet (University) Universitet (University) Norges Laererhøgskole (The State college for teachers) Andre Høgskoler (Other colleges of university level)		The qualification of "adjunkt" is required to teach theoretical subjects in the new "youth classes" of the "Grunnskole" (7th-9th grade). The "adjunkt" may have either a full university degree (see below) or be a primary teacher with additional training in certain academic subjects (2 years). At the universities, special summer courses are run for primary school teachers who want to qualify as an "adjunkt". (Then more than 2 years is necessary).
3. Gymnasium (2nd cycle secondary school)			The qualification necessary is the "lektor" exam. This usually completes a period of university study of about 6-7 years, but may also be obtained by additional studies using a teacher's certificate as 1st diploma. The "lektor" qualification can take the form of either a degree in humanities (cand. philol.) or in mathematics and natural sciences (cand. real.). In addition the 3-year course at the "Pedagogisk Seminar" must be followed. In addition the degree in pedagogy (cand. paed.) may qualify for "lektor". Teachers of commercial subjects (at the "Handelsgymnas") are graduates from the Norwegian School of Economics and Business Administration and thereafter they attend a special course of 1-1½ years duration - giving theoretical and practical teachers' training.
4. Yrkeskoler for håndverk og industri (Vocational schools of handicraft and industry)		1, 1½	The school offers a complete course of 1½ years. The applicants must have the Journeyman's certificate and 5 years' of practical experience (see 6.1.3.). A course of 1 year is offered for skilled workers with long experience of school teaching. In addition there is also an established system of training through correspondence courses. Teachers of theory at workshop schools may have the teaching certificate examination from the training college plus additional training, engineer's training or other university college education.
4.1. Verkstedskoler og lærlingskoler (Workshop schools and schools for apprentices)	Statens Yrkeslærerskole (The State school for training of vocational teachers)		
4.2. Tekniske skoler (Technical schools)	Norges Tekniske Høgskole (The State Institute of Technology)		Most of the teachers are civil engineers with half a year pedagogic training at the "Pedagogiske Seminar" or "lektor" in science subjects, with a "cand. real" degree.

NORWAY

TEACHER'S TRAINING

102

Teachers	Place of Training	Length of Study (in years)	Other Information
4.3. Husflids-og heimedyrskoler (Schools of handicraft and trade)	Laererskoler i forming (teacher training schools of home arts and crafts)		Usually the courses are of 2 years duration. Folk high school and 1 year at a school of handicraft and trade is required.
5. Fagskoler for landbruks- og fiskeriskoler (Vocational schools of agriculture, etc.)	Norges Landbruks- og fiskeriskole (The State College of Agriculture)	3	Teachers of theoretical subjects are usually graduates from the appropriate department of "Norges Landbruks- og fiskeriskole". Teachers of practical subjects may have been trained at a 2-year specialized branch of a school of agriculture.
6. Handelsskoler (Commercial schools)	The special teacher training examination	Variable	The examination can be prepared by means of private tuition, consisting of papers in pedagogy, special subjects and a practical teaching examination. "Examen Artium" (economic branch) and 2 years of practical experience is necessary and the candidate must be 21 years old before sitting the teacher training examination.
7. Fagskoler i husstell (Domestic science schools)	Statens laererskoler i heimkunnskap/husstell (Training colleges for teachers of domestic science schools)	2	The candidates must have a thorough general education (folk high school or gymnas) and housekeeping experience in addition to a diploma from a domestic science school.
8. Maritime skoler (Maritime schools)	Maritime schools		The teachers are usually recruited from the appropriate profession; except for languages and general subjects. Teaching in marine subjects requires the highest qualification possible in the appropriate school. In addition candidates must complete a 1-year advanced masters' course, providing practical training in teaching.
9. Universitet og Høgskoler (Universities and colleges of university type)	Universities and colleges		(a) Professor. In most cases the professor has taken a doctorate. (b) Dosent (Associate professor). A dosent may also have a doctorate. In all cases he has carried out original personal research work. (c) Amanuensis (Assistant professor). There are two degrees here, 1. and 2. Amanuensis. (d) Universitets og Høgskole - lektor (University and college lecturer). (e) Vitenskapelig Assistent (Research Assistant). (f) Stipendiat (Scholarship holder). (g) Licentiat. Students pursuing their studies after their 1st degree often combine this with the post of research assistant or holder of a scholarship. (h) Personlig professorat (Personal professorship). Candidates with the necessary scientific background may be offered a personal professorship when no official chair is available.

BIBLIOGRAPHY

- Undervisningsstatistikk
 Folke of Framhaldsskoler 1967/68
 Folke Høgskoler 1967/68
 Fag- og yrkesskoler 1967/68
 Høgre Allmennskoler 1967/68
 Universiteter og Høgskoler 1965/66
- Innstilling I og II om det Videregående Skoleverket, I : 1967, II : 1969
- Innstilling I om Videreutdanning for Artianere m.v.
- Educational systems in Scandinavia, (Herman Ruge) 1962
- The system of education in Norway, (Olav Hove) 1968
- Akademiske Studier, (Torjörn Sirevåg) 1964
- Statistisk Arbok, 1968
- Studenthandboka, 1967 og 1970
- Schools in Europe, vol. I, part I, (Walter Schultze) 1969
- World Survey of Education - vol. II, III, IV, UNESCO
- Schools systems a guide : Council of Europe
 Council of Cultural Co-operation, 1965
- Society, schools and progress in Scandinavia, (Willis Dixon) 1965
- Development of higher education, 1950-1967 - Statistical Survey - OECD, 1970

SPAIN

(August 1971)

Compulsory schooling: 8 years, from the age of 6 to 14

SPAIN

106

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
1. <u>Pre-primary education</u>							
1.1. Escuelas maternales o Jardín de infancia (Kindergarten)	2	-	-		Non-compulsory education. These schools cater for children between 2 and 3 years of age. Most of them are private.	Pre-primary	-
1.2. Escuelas de parvulos (Pre-primary schools)	2	-	-	5 hours in morning, 2 in afternoon from Monday-Friday	These schools are for children aged between 4 and 5. Most of them are State schools, and can be affiliated to a primary school.	Pre-primary	-
2. <u>Primary and general secondary education (short course) (prior to Reform of 4.8.1970)</u>							
2.1. Escuelas primarias (Primary schools)	8	According to cycles	According to cycles	Full time	Instruction provided in these schools covers the period of compulsory education. The following types can be distinguished: - the "escuelas nacionales" - State schools. - the "escuelas de la iglesia" - ecclesiastical schools which are either recognized if they satisfy certain conditions concerning the qualifications of the teachers or are subsidised if in addition to meeting these requirements they are not fee-paying. - the "escuelas de patronato" (foundation schools). These are organised by the State in collaboration with the local authorities, or by industrial or agricultural firms which are bound by law to open schools if the number of children of school age of their staff is over 30 and they are situated in a region where there	According to cycle	1-8

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
2.1.1. Periodo elemental (Elementary cycle)	4	To be 6 years old	No examination. After 4th year pupils can continue their studies either in primary schools or begin the 1st cycle of secondary education (after an examination).	Full time	are no or an insufficient number of schools. These are State schools. - the "escuelas privadas" (private schools). Primary schools are also divided into: - "escuelas unitarias" (one-class schools) where instruction is given by one teacher to all children of compulsory school age. These schools are very common. - "escuelas graduadas" - schools with several classes. These schools have a minimum of two and a maximum of seven classes. - "grupo escolar" - school groups or "colegios nacionales": schools with at least eight distinct classes, one class for each of the 8 years of the period of compulsory schooling. With the implementation of the 1970 Reform Act these schools are gradually being replaced by "centros de educación general básica" (basic general education centres). Instruction is compulsory and common for all children aged between 6 and 9. In certain cases age of admission can be reduced or increased.	Primary	1-4

SPAIN

108

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
2.1.2. Período de perfeccionamiento (Advanced cycle)	4	Completion of primary school elementary cycle	Primary certificate (Certificado de estudios primarios) enabling pupils to take the qualifying examination to 3rd year of General secondary or technical education and the compulsory education certificate for pupils who have not sat the primary certificate examination	Full time	Instruction is compulsory for all children aged between 10 and 13 who do not attend a general secondary or vocational school. After a period of 2 years in the "advanced" cycle pupils can begin vocational training. The compulsory education certificate is also granted to those pupils who have reached school leaving age without completing the full cycle. Before 1964, this cycle only lasted 2 years and the primary certificate exam was taken after the 11th birthday. (Length of compulsory education was then 6 years).	General secondary (b)	5-8
2.2. Escuelas de orientación agrícola (Schools with agricultural bias)	4	Completion of 1st cycle primary education	Leaving certificate	Full time	These schools organised by the "Instituto Nacional de Colonización" and the Ministry of Agriculture provide agricultural training in addition to advanced primary education. According to the 1970 Reform these schools will become part of 2nd cycle of basic general education.	General secondary (b)	5-8
2.3. Escuelas de orientación marítima (Schools with bias in maritime studies)	4	Completion of 1st cycle primary education	Leaving certificate	Full time	These schools which are run by the "Instituto Social de la Marina" affiliated to the Ministry of Labour provide nautical training in addition to the 2nd cycle of primary education. According to the 1970 Reform these schools will become part of 2nd cycle of a basic general education.	General secondary (b)	5-8
3. Primary and 1st cycle general secondary education since reform of 1970	8	According to cycles	According to cycles	Full time	According to the 1970 school reform this course will replace the two primary cycles and the 1st secondary cycle. It will be common and compulsory for all pupils, aged between 6 and 13. State establishments will be known as "Colegios Nacionales" (National Colleges).		

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
3.1.1. Primera etapa (1st cycle)	4	To be 6 years old but exceptions can be made in favour of age	No examination. Transition from one class to another is made on teachers' advice	Full time	Instruction common to all pupils. During school year 1970-71 the 4 years of this cycle were affected by the implementation of the Reform Act.	Primary	1-4
3.1.2. Segunda etapa (2nd cycle)	4	Completion of 1st cycle	The title of "graduado escolar" is conferred on pupils who have completed their period of schooling satisfactorily. It is the sole means of access to the 2nd cycle (bachillerato) of general secondary education. Those who do not fulfil these conditions must sit a maturity test and failing this they receive a compulsory education certificate giving access to 1st cycle or vocational training centres.	Full time	This cycle will replace the advanced primary cycle and the elementary cycle of secondary schools and will constitute a common trunk with a restricted choice in subjects. In addition to the general subjects and the learning of a foreign language pupils will undergo a certain amount of vocational training leading to a greater variety of courses later on. This cycle will be introduced gradually over the period 1971-72 to 1974-75 by adding 1 year of the course at the beginning of each school year.	General secondary (a) or (b)	5-8
4. Special education							
4.1. Escuelas especiales (Special schools)	Variable		Variable	Full time	In addition to the schools for children who are handicapped either physically or mentally there are "escuelas de hogar", which are residential schools designed for children living in regions with a scattered population, open air schools for children of poor health and the "escuelas reformativas" for children who have committed a major offense. The aim of these schools is to help retarded or maladjusted children to lead as normal a life as possible.	Special	Variable

SPAIN

110

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (a) (7)	Years of Study (8) (8)
General and technical education (long course) Prior to Reform Act of 4.8.1970 5. Centros de enseñanza media (modern and classical secondary schools)		According to cycles	According to cycles	Full time	Studies are divided into 3 cycles and completion of all 3 cycles generally leads to university education. Pupils can, however, leave school at the end of each cycle in order to take up employment or to continue another type of education. There are several types of institutions providing this type of education: (1) the "institutos nacionales" (national institutes) situated in major cities and covering the 3 cycles; (2) the "secciones delegadas" (annexes) also in major cities but with only 1st cycle; (3) the "secciones filiales" (subsidiary sections) in the suburbs also with only 1st cycle; (4) the "centros oficiales de patronato" (foundation schools) established in big towns without an "institute" and covering the 3 cycles. These four types of establishments are State controlled. Evening classes (estudios nocturnos) are sometimes organised in the institutes; (5) the "colegios libres adaptados" (recognized colleges) belonging to local authorities and recognized by the State. These institutions only provide 1st cycle education; (6) the "centros para la enseñanza libre" - private schools which are not recognized and where pupils are examined annually by a State examination board; (7) the "colegios reconocidos" (recognized private schools) which are required to make an official record of pupils' progress and qualifications; (8) the "colegios autorizados" which are recognized private schools where pupils are required to be examined by mixed board of examiners including official representatives. The secondary education system is entirely reorganised by the 1970 Reform (see below).	General secondary (a)	Depending on cycles

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
5.1.1. Ciclo elemental (1st cycle)	4	Minimum age is 10 and completion of 1st cycle primary education; pass in entrance examination required.	Bachillerato elemental (1st cycle leaving certificate) giving access to 2nd cycle of secondary schools and to primary teacher training schools, commercial schools and schools for sanitary assistants	Full time	Pupils holding the primary certificate can go into 3rd year after passing an examination (on which case they are 2 years behind pupils who entered directly after the 1st primary cycle). The end of this 1st cycle coincides with the end of compulsory schooling. Instruction is same for all pupils and may be compared to a "guidance cycle". According to the 1970 Reform this cycle will be replaced by the 2nd cycle of basic general education.	General secondary (a)	5-8
5.1.2. Ciclo superior (2nd cycle)	2	To hold the "bachillerato elemental" and be at least 14 years old	"Bachillerato superior" (Secondary leaving certificate) giving access to pre-university courses to schools for higher technicians or to various posts in public or private administration	Full time	Pupils have a choice between two options: arts (Latin and Greek) and sciences (mathematics, physics and chemistry). But these options in no way determine pupils' future studies, and the secondary leaving certificate bears no mention of the chosen option. According to the 1970 Reform the length of this cycle will be increased to 3 years. (See below).	General secondary (a)	9-10
5.1.3. Curso pre-universitario (Pre-university courses)	1	Completion of 2nd cycle of secondary education	Depending on examination results: "Prueba de suficiencia" (leaving certificate) or "Prueba de madurez" (maturity certificate) giving access to university	Full time	This is a compulsory class for all pupils who have completed the 2nd cycle of secondary education and who wish to go to university. Pupils who have failed the "bachillerato superior" examination can re-sit it while attending the pre-university class. Pupils have a choice between two options: classics or science (mathematics, physics and chemistry). Either choice does not influence later university studies. According to the 1970 Reform this class will be included in studies leading to the secondary leaving certificate.	General secondary (a)	11

SPAIN

112

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
5.2. Centros de enseñanza laboral (Technical secondary schools) - agrícola, ganadera (agriculture, stock breeding) - industrial y minera (industry, mines) - administrativa (administration) - marítima-pesquera (navigation, fishing)	5 + 2	According to cycles	According to cycles	Full time	Studies are divided into 2 cycles and generally lead to higher scientific and technical education. Courses are provided in the following establishments: (1) the "centros del Estado", State schools; (2) the "universidades laborales", technical universities administered by the Ministry of Labour and providing only 2nd cycle; (3) the "centros de la Iglesia", religious schools; (4) the "centros privados", private schools; (5) the "centros de la organización sindical", schools run by trade unions.		
5.2.1. Curso elemental (1st cycle)	5	To be at least 10 years old, have completed 1st cycle primary education and have taken entrance examination	Bachillerato técnico elemental (1st cycle technical leaving certificate) giving access to primary teacher training colleges, to commercial schools and to schools for technical sanitary assistants	Full time	This 1st cycle was abandoned in 1967. All pupils complete the general secondary education elementary cycle and the choice between general and technical studies is only made at the beginning of 2nd cycle. According to the 1970 Reform, this 1st cycle will be replaced by the 2nd cycle of basic general education.	Technical secondary (a)	5-9
5.2.2. Curso superior (2nd cycle)	2	To hold the 1st cycle technical leaving certificate	Bachillerato técnico superior (secondary technical leaving certificate), giving access to higher education after a maturity examination except to faculties of arts, philosophy, law, economics and political science	Full time	According to the 1970 Reform this course will be abandoned and will henceforth constitute only an optional subject in studies leading to secondary leaving certificate.	Technical secondary (a)	10-11

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
6. 2nd cycle general secondary education since Reform of 4.8.1970	3	To hold the "grado escolar" (basic general education leaving certificate)	Bachillerato (secondary leaving certificate) giving access to university	Full time	The 1970 Reform has introduced this new type of course which will replace the 2nd cycle of general and technical secondary education. It will become effective in 1972-73 for 1st year of studies. In 1973-74 for 2nd year and 1974-75 for the 3rd. There is only one type of secondary leaving certificate, and after the completion of the university foundation year, it leads to all faculties and higher vocational training. In addition to common and optional subjects, instruction includes technical-vocational subjects which are compulsory for all pupils, thus equipping them to make a better choice in later studies. State establishments are called "institutos nacionales de bachillerato".	General secondary (a)	9-11
6.2. Curso de orientación universitaria (University foundation courses)	1	Secondary leaving certificate (bachillerato) or 2nd cycle vocational certificate	Leads to university education	Full time	This course is provided in "centros de bachillerato" but supervised by university. It was run on an experimental basis in 1970-71 and was optional. It will be compulsory from 1971-72.	Pre-university year	12
7. Technical and vocational secondary education					Instruction is provided in the following types of schools: "escuelas oficiales" (official schools), "universidades laborales" (technical universities), "escuelas de la Iglesia" (ecclesiastical schools), "escuelas de la organización sindical" (schools run by trade unions), "escuelas privadas" (private schools), "escuelas militares" (military schools). There are "centros de aprendizaje industrial" (apprenticeship centres) and		
7.1. Centros de formación profesional industrial (Industrial vocational training schools) before Reform of 4.8.1970							

SPAIN

114

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
7.1.1. Iniciación profesional (Introductory vocational courses)	2	Completion of first 2 years of advanced cycle of primary education	Leaving certificate giving access to apprenticeship courses proper	Full time or part time	"centros de maestria industrial" (centres providing industrial training for foremen) in which pupils can undertake full-time or part-time studies or attend complementary courses outside their work. The 1970 Reform has completely altered the organisation of this type of education.	Technical secondary (b)	7-8
7.1.2. Aprendizaje (Apprenticeship)	3	To be 14 years old and have completed 2 years of pre-apprenticeship training in a primary school or a school providing an introductory vocational course	Certificate of "official industrial" (skilled workman) in branch of studies chosen. This certificate gives access to intermediate level technical schools.	Full time	With the implementation of the 1970 Reform this course will be abandoned. Pupils will be obliged to complete their 8-year period of compulsory schooling in schools providing general basic education.	Technical secondary (b)	9-11
7.1.3. Centros de maestria industrial (Centres providing foremen's industrial training)	2	To be 17 years old and hold the certificate of "official industrial" (skilled workman) or the 1st cycle technical leaving certificate	"Maestria industrial" certificate (foreman's industrial certificate) giving access to 1st year of technical intermediate schools	Full time	Full-time education takes place in residential schools. Part-time training includes 18 hours of classes a week, pupils undergoing practical training within the firm. According to the 1970 Reform Act, this type of course will become part of the vocational training course (1st cycle). This course will also become part of the vocational training (1st cycle) as planned in the 1970 Reform.	Technical secondary (b)	Variable
7.2. Vocational training since Reform of 4.8.1970					This type of education will be based on the specific techniques of industrial, agricultural, commercial, administrative or artistic professions. It is intended to form a bridge between general education and the particular occupation pupil will take up. It will be possible to supplement and update it by in-service vocational training courses. The Reform Act will be implemented over years 1970-71 - 1975-76.		

SPAIN

115

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
7.2.1. Primer grado o iniciación profesional (1st cycle introductory vocational courses)	Maximum of 2 years	To be a "graduado escolar" or hold the general basic certificate of education	Level of skilled workman	Full time	The course is compulsory for all pupils who do not continue their general education after their 8-year period of basic education.	Technical secondary (b)	9-10
7.2.2. Segundo grado o nivel medio (2nd cycle - intermediate level)	Maximum of 2 years	To have the "bachillerato" (secondary leaving certificate) or have attended the introductory vocational course	Technical level	Full time	Instruction is intended for pupils who wish to enter employment on completion of their secondary education or for those who are already in employment but who wish to improve their knowledge in order to attain higher posts.	Technical secondary (a)	Variable
7.2.3. Tercer grado o superior (3rd cycle - higher level)	Maximum of 2 years	Completion of 1st cycle of higher education	Specialist certificate. Higher technical level, teacher of 2nd cycle of basic education.	Full time	This 3rd cycle is intended in particular for pupils who, after 3 years of higher education, wish to acquire a specific training preparing them for a particular occupation.	Higher non-university (technology)	Variable
7.3. Maritime vocational training							
7.3.1. Formación profesional (Vocational training for navigation and fishing)	2	Minimum age 16. Experience of navigation and fishing required.	According to specialized subjects	Full time	The schools are not administered by the Ministry of Education and Science but by the Under-secretary of the Merchant Navy. Their aim is to train in-shore or deep-sea fishing captains together with navigation mechanics. They cater to both young people who have just finished their general education and adults who wish to improve their knowledge and skill.	Technical secondary (b)	Variable
7.4. Agricultural vocational education							
7.4.1. Escuelas de capacitación agraria (Agricultural schools)	2	To be 16 years old and have some practical agricultural experience	Certificate of "capacitación agraria" (professional agency in agriculture) giving access to intermediate technical schools after completion of a preparatory course	Full time	These schools are administered by the Ministry of Agriculture. They provide specialized training (grape-growing, forestry, agricultural mechanics, etc.) for young agricultural workers. There are also intensive courses lasting from between 7 days to 3 months for adults (cursos intensivos de adiestramiento profesional agrario).	Technical secondary (b)	Variable

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
7.5. Artistic education							
7.5.1. Escuelas de arte y oficios artísticos (Schools of applied arts and crafts)	5	Completion of 6 years of study and have taken entrance examination	Certificate in the specialized subject or art teacher's certificate	Full time	The first 3 years constitute a common course for all pupils. The last 2 years are devoted to the study of one specialized subject.	Technical secondary (b)	7-11
7.5.2. Escuelas de cerámica (Schools of ceramics)	5	"	"	Full time	" " "	Technical secondary (b)	7-11
7.6. Commercial education							
7.6.1. Escuelas periciales de comercio (Schools for commercial technicians)	3	To be 14 years old, hold 1st cycle general or technical secondary leaving certificate and take entrance examination	Perito mercantil (commercial technician's certificate)	Full time	Besides courses leading to the commercial technician's certificate, certain schools provide evening classes in vocational training preparing candidates for employment as commercial auxiliaries.	Technical secondary (b)	9-11
8. Higher vocational-al and technical education							
8.1. Technical education							
8.1.1. Escuelas técnicas de grado medio (Intermediate technical schools)	3, 4 or 5	A. Preparatory courses. Up until 1965: all types of 1st cycle leaving certificate, skilled workmen or 1st degree workmen. Since 1965: Holders of the elementary technical leaving certificate are exempted from this course and holders of a general 1st cycle leaving certificate are no longer admitted to these schools.	Certificate of "perito" (technician-engineer) gives access to teaching in technical schools, to higher technical schools and to science faculties on examination	Full time	These schools give preparation for technician engineer's certificate in specialized subject studied. The courses proper last 3 years but are preceded by a preparatory and adaptation course for those candidates who do not satisfy the necessary entrance requirements. There are also evening courses. According to the 1970 Reform, these schools will be incorporated in the university schools affiliated to the universities and will offer a 2-3 year course corresponding to the 1st cycle of university studies and giving the same rights. They will be called "Escuelas de Ingeniería Técnica"	Higher non-university (technology)	12-14 or 10/11-14

SPAIN

117

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
- peritos navales (maritime studies) - peritos obras publicas (public works) - peritos de telecomunicación (telecommunications) - peritos textiles (textiles) - peritos topógrafos (topographers)		B. Selection course. Up until 1965: all types of secondary leaving certificate, chartered accountants, primary school teachers and holders of foreman's certificate in industry. Since 1965 this course, known as an adaptation course, is intended only for holders of a technical 1st cycle leaving certificate. C. 1st year: Up to 1965 admission took place after selection course. Since 1965 direct admission for holders of all types of secondary leaving certificate, chartered accountants, primary school teachers and holders of advanced industrial qualifications.					
8.1.2. Escuelas de náutica (Technical nautical schools) - Máquinas (machines) - Puente (deck)	3-4 or 5	Same as for intermediate technical schools (see 8.1.1)	"Perito" certificate (see 8.1.1.)	Full time	Organisation of course is same as in intermediate technical schools.	Higher non-university (technology)	12-14 or 10/11-14

SPAIN

118

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
8.2. Para-medical education							
8.2.1. Ayudantes técnicos sanitarios (Para-medical assistants)	3	Minimum age is 16. Candidates required to hold a primary teacher's certificate, a commercial technician's certificate or the general or technical secondary leaving certificate and to take the entrance examination.	Para-medical assistant's or nurse's certificate	Full time	Since the 1970 Reform, these courses are run by university schools. After completion of regular course, it is possible to attend specialization courses in obstetrics or gynaecology or physiotherapy, radiology, etc.	Higher non-university (medical science)	12-14
8.2.2. Escuelas de puericultura y sanidad (Schools for child welfare workers)	3	Same entry conditions as for para-medical assistants	Certificate in child care	Full time		Higher non-university (medical science)	12-14
8.3. Commercial education							
8.3.1. Escuelas profesionales de comercio (Vocational commercial schools)	3	2nd cycle technical or general leaving certificate or commercial technician's certificate	"Profesorado mercantil" certificate (commercial teacher) leading to Faculties of Politics and Economics	Full time	Students are required to present a memoir before a five-member board of examiners on completion of their studies. Courses have been held in university schools since 1970 Reform.	Higher non-university (social sciences)	12-14
8.4. Teacher training							
8.4.1. Escuelas superiores de magisterio (Primary teaching schools)	Before 1965: 3 years. Since 1965 up to Reform: 3 years.	Before 1965: 1st cycle leaving certificate. From 1965 onwards, to Re-2nd cycle leaving certificate.	Primary school teacher's certificate giving access to pedagogical sections of universities, or since 1970, to 2nd cycle of university studies	Full time	These schools have become university schools since 1970 Reform. Pupils attend the same classes as in other schools of the same type, that is, the "guidance cycle" followed by 3 years of instruction plus 1 year of 3rd level vocational training which, in this case, is pedagogical training.	Before 1965: Secondary 9-11 teacher training. Since 1965: 1965 to 1970: Higher non-university (education). Since 1970: 11-13	

SPAIN

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
8.5. Artistic education							
8.5.1. Escuelas de bellas artes (Fine art schools)	1 + 5	2nd cycle secondary leaving certificate	Certificate in specialized subject studied	Full time	There is a preparatory year of studies before the course proper begins. These schools have enjoyed university status since the 1970 Reform.	Higher non-university (fine arts)	12 - 17
8.5.2. Conservatorios superiores de musica y declamacion (Conservatory of Music)	1 + 5 for the advanced course	2nd cycle secondary leaving certificate for advanced course	Certificate in specialized subject studied	Full time	In addition to advanced courses, these schools may provide a vocational course in which case pupils are admitted from the age of 10 after an entrance examination. The length of the course varies according to the section attended and the certificate prepared. The advanced section will be included in university education according to the 1970 Reform, and will comprise three cycles leading, respectively, to the "diplomado", the "licenciado" and the "doctor". (See organisation of university studies below).	Higher non-university (fine arts)	12 - 17
8.5.3. Escuela superior de arte dramático (Higher school of dramatic art)	1 + 5	2nd cycle secondary leaving certificate	Certificate in specialized subject studied	Full time	Organisation of course and status of these schools is same as for Conservatory of Music.	Higher non-university (fine arts)	12 - 17
9. Adult education							
9.1. Escuelas sociales (Social studies)	Variable	Minimum age is 16, and candidates are required to sit an entrance examination from which leaving certificate holders and former pupils from the "escuela de capacitación social de trabajadores" are exempted	Leaving certificate	Part time	The aim of these schools is to give workers training in social studies, economics and trade unionism. Courses take place in the evening.	Adult education	

SPAIN

120

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
9.2. Escuela de capacitación social de trabajadores (Workers' social training school)	45 days	-	-	Part time	There is only one school of this kind and it is in Madrid. It provides workers with civic and social training through a residential course lasting 45 days. Candidates receive their normal salary throughout the course.	Adult education	
9.3. Permanent training of adults	Variable	Variable	Variable	Part time	Courses provided in the scheme of permanent education for adults include basic education, "bachillerato", vocational training, as well as further training, promotion, refresher courses and courses in professional re-training.	Adult education	
10. Otras enseñanzas (Other types of education)	Variable	Variable	Variable		Duration and entrance requirements of these specialized courses are variable. The majority are intended for adults, and courses are held in the evening.	Adult education	
10.1. Idiomas (Languages)	3 or 4				These schools have been incorporated in the university schools or vocational training centres since the 1970 Reform according to the level of studies. Courses are provided by the Central School of Madrid, the Higher School of Administration and Employment Guidance, and by university institutes. The school of Arab studies provides 1-year courses.		
10.2. Mandos intermedios (Training of middle-level employees)	2						
10.3. Publicidad (Advertising)	3						
10.4. Secretariado y administración (Office studies and administration)	3						
10.5. Turismo (Tourist industry)	3						

SPAIN

121

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
10.6. Auxiliares de la investigación (Scientific research assistants)	1				These courses are provided by the Higher Council for Scientific Research.		
10.7. Ciencias sociales (Social sciences)	3				Courses provided by the Institute of Social Science.		
10.8. Criminología (Criminology)	1				Provided by the Institute of Criminology.		
10.9. Educación física (Physical education)	2 or 3				The National School of Athletic Trainers provides a 1-year course for women and a 2-year course for men; the specialized school of "Julio Ruiz de Alda" provides a 3-year course exclusively for women.		
10.10. Estadística (Statistics)	1						
10.11. Genealogía (Genealogy)	3						
10.12. Policía (Police)	1						
10.13. Psicopedagogía (Psychopedagogy)	1						
10.14. Radiotelegrafistas (Wireless operating)	1 or 2				The official nautical schools offer a 1-year course reserved for men and the official school of telecommunications offer a 2-year course.		
10.15. Técnica empresarial (Employment techniques)	1 or 4				The Higher School of Administration and Labour provides a 1-year course for men and the Institute Nevares a 4-year course specialised in agriculture.		
10.16. Urbanismo (Town Planning)	1				Men only.		
10.17. Religiosas (Religious education)	Variable						

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
10.18. Enseñanza eclesialística (Ecclesiastical education)	Variable				Instruction given in seminaries and includes either Latin and arts subjects or philosophy or theology.		
11. University education prior to 1970 Reform							
11.1. Escuelas técnicas superiores (Higher technical schools)	5	2nd cycle secondary leaving certificate and maturity certificate or "perito" or a military school's certificate or commercial teacher's certificate	Engineer's or architect's diploma	Full time	A guidance and introductory course preceded the course proper before 1965. Holders of a "perito" certificate (higher technician's level) or a 2nd cycle secondary general and technical leaving certificate and a maturity certificate were admitted to the guidance course. It was possible to attend this course in technical schools or faculties of science. Those students considered "fit" at the end of the course proceeded to the introductory courses common to all specialities and held only in the technical schools. The course of study proper lasted 4 or 5 years. In 1965 both the selection and introductory courses were abolished. After obtaining the certificate, students can complete 2 further years of study and present a thesis with a view to obtaining the title of Doctor of Engineering or Doctor of Architecture. According to the terms of the 1970 Reform Act, these schools have university status and courses will be organised likewise - that is, in three cycles.	Higher university	

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
11.2. Universidades (Universities)		Bachillerato superior (2nd cycle secondary leaving certifi- cate) and maturity examination (prueba de madurez). For other entrance possibilities, see column 6 opposite.	Licenciado (1st degree) Doctor (doctorate)		The universities consisted of the following faculties: Science; Political, Commercial and Economic Sciences; Law; Pharmacy; Philosophy and Arts; Medicine; Veterinary Medicine. Various institutes and specialized colleges were affiliated to the universities. The 2nd cycle secondary leaving certificate in Arts or Science subjects was a pre-requisite for admission to a faculty, and candidates also required to have attended a pre-university course and have passed the maturity examination (prueba de madurez). Holders of the 2nd cycle technical leaving certificate (laboral) could be admitted to the Faculty of Science after passing the maturity examination. In order to enrol in the Arts Faculty, they were required to attend a pre-university course and take the maturity examination. Students, desiring to enter the commercial teaching profession could enrol in the economic and commercial sections in the Faculty of Political, Economic and Commercial Science and primary teachers could enrol in the pedagogic section of the Faculty of Philosophy and Arts (without holding the 2nd cycle secondary leaving certificate). There were no numerus clausus, but the 1st year of studies was, in general, a selection year ending with an examination which students had to pass in order to be able to continue their studies. The course was divided into 2 cycles: the 1st cycle leading to the 1st degree (licenciado) after courses of variable duration according to the faculty concerned. The 2nd cycle led to the doctorate which comprised the presentation of a thesis and a complementary memoir. In theory attendance at lectures and practical classes was compulsory, but there were no strict rules regarding	Higher university	
11.2.1. Ciencias (Sciences)	1						
- curso selectivo (selection course)							
- licenciado	4						
11.2.2. Ciencias políticas, econó- micas y comerciales (Political, econo- mic and commercial science)							
- licenciado	5						
11.2.3. Derecho (Law)							
- licenciado	5						
11.2.4. Farmacia (Pharmacy)							
- licenciado	7						
11.2.5. Filosofía y letras (Philos- ophy and arts)							
- estudios comunes (common course)	1						
- licenciado	4						
11.2.6. Medicina (Medicine)							
- licenciado	7						
11.2.7. Veterinaria (Veterinary medi- cine)							
- licenciado	7						

SPAIN

124

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
12. University education - System introduced by 1970 Reform					attendance. Examinations generally took place every 4 months and were based on either one single subject or on a group of subjects and, in some cases, were selective. At the end of the complete cycle of studies, students had to sit a final examination with oral and written papers in order to obtain the degree. Only those students who had successfully completed the study of various subjects, the number and nature of which were determined by each faculty, could enrol in courses leading to the doctorate degree.		
12.1. Universidades (Universities)					The universities consist of faculties divided into departments and higher technical colleges and institutes, schools and university colleges.	Higher university	
1º ciclo básico (1st cycle basic course)	3	(a) To hold the "bachillerato" (2nd cycle comprehensive secondary certificate) and have attended a pre-university guidance course. (b) For people over 25 years of age without the "bachillerato": entrance examination.	Diplomado (diploma)		The department constitutes the basic teaching and research unit. The faculties and higher technical colleges are the centres which coordinate the conferring of academic awards in all cycles of one particular field of study. The higher technical colleges can bear the title of technical universities.	Lower degree	
2º ciclo de especialización (2nd cycle specialisation)	2	(a) Completion of 1st basic cycle. (b) To be a graduate of a university school. (c) Have completed 2-year course as architect-technician or engineer-technician.	Licenciado (degree)		The institutes are research and specialization centres, embracing for this sole purpose the staff of one or several university departments and their own staff. They may be affiliated to a faculty, a higher technical college or directly to university. The university colleges are centres providing only 1 cycle of studies corresponding to the 1st cycle of university education.	1st degree	
					The university schools provide only one course of studies lasting from 2 to 3 years.		

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	OECD Classification	
						Type of Education (7)	Years of Study (8)
3 ^o ciclo de especialización concreta y prepara- ción para la inves- tigación y docencia (3rd preparatory research and teach- ing cycle)	Varia- ble	(a) Completion of 2nd cycle. (b) To hold the architect-techni- cian's or engineer-techni- cian's degree.	Doctor (doctorate)		In order to have access to university studies, holders of the 2nd cycle secondary leaving certificate are required to attend the guidance course. This 1-year course aims at providing pupils with a more thorough knowledge of basic subjects, guiding them in the choice of their university course and preparing them for same. The course is organised and supervised by the university but can be held in establishments of secondary education. People who are over 25 and who do not hold the secondary leaving certificate but have attended an equivalent course in special centres or those affiliated to ordinary centres can also secure admission to higher education. Higher studies are divided into 3 cycles: (1) The 3-year 1st cycle is devoted to the study of basic disciplines after which students who have attended advanced vocational training classes (tercer grado) receive the title of graduate (diplomado) in the subject of their studies whereupon they are qualified to exercise an intermediate level profession: teachers of general basic education, vocational guidance auxiliaries, dietetic technician, programmers, etc. (2) The 2-year 2nd cycle is devoted to specialization and both students who have completed the 1st cycle and graduates from university schools who have attended a selective adaptation course are eligible for admission. At the end of this cycle students are awarded the title of graduate (licenciado), engineer or architect, qualifying them to hold a high level post. (3) The 3rd cycle leads to the doctorate and comprises the preparation and presentation of a thesis on an original subject. Studies last at least 2 years.	Doctorate	

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
12.2. Universidades politécnicas (Polytechnics)	See op- posite column 6	University found- ation course	According to speciality		The 1st cycle in medicine lasts 4 years (premedicas). Other courses lasting 3 years after the guidance course train para-medical technicians. Students who have completed 1 or 2 years pre-medical studies may also attend these courses provided previous studies have been approved. The 2nd cycle takes place mainly in the hospital centres administered and recognized by the Minister of Education and Science. The course comprises a core of common compulsory subjects and optional subjects. Each university is responsible for the organisation of courses in accordance with the general lines laid down by the Minister of Education and Science. A "tutelage" system will be introduced, each tutor being in charge of a limited number of students. These universities are made up of higher technical schools (escuelas técnicas superiores), advanced level vocational schools (escuelas de formación profesional de 3º grado) and technical university schools (escuelas universitarias técnicas). The 2nd cycle secondary leaving certificate is a pre-requisite for admission. Studies proper commence after a technical guidance course common to all students and are divided into 3 cycles. The course leads to the advanced engineer's or architect's diploma or to the doctoral degree. The technician-engineer's course includes 2 years of technology and 1 specialized year after the preliminary guidance course. Students who have completed the 2nd year of studies can proceed to the 2nd cycle of the advanced engineer's course once they have attended a selective adaptation course designed to complete their	According to degree	

SPAIN

127

Type of Education or Institution (1)	Length of Study (in years) (2)	Entrance Requirements (3)	Certificate (4)	Full/ Part Time (5)	Other Information (6)	O.E.C.D. Classification	
						Type of Education (7)	Years of Study (8)
					theoretical training. Similarly, 1st cycle advanced engineering students can obtain the title of technician- engineer by attending a "bridge" course of 3rd year level.		

Fields of Study	O.E.C.D. Classification	Fields of Study	O.E.C.D. Classification
1. Escuelas técnicas superiores (Higher technical schools) - Aeronáuticos (Aeronautics) - Agrónomos (Agronomy) - Caminos, canales y puentes (Roads and water-ways construction) - De minas (Mining) - De montes (Waterways and forestry) - De telecomunicación (Telecommunications) - Industriales (Industry) - Navales (Marine engineering) - Arquitectura (Architecture) 2. Universidades (Universities) - Ciencias (Faculty of science) curso selectivo (selection course) biológicas (biology) físicas (physics) geológicas (geology) matemáticas (mathematics) químicas (chemistry) - Ciencias políticas, económicas y comerciales (Faculty of political, economic and commercial science) - económicas y comerciales (economic and commercial science) - políticas (politics)	Technology Agriculture Technology " " " " Architecture Pure science Social science	- Derecho (Law faculty) - Farmacia (Faculty of pharmacy) - Filosofía y letras (Faculty of arts and philosophy) estudios comunes (common course) antropología americana (American anthropology) arte (history of art) bíblica trilingüe (study of the three biblical languages) filología clásica (classical philology) filología moderna (modern philology) filología románica (romance philology) filología semítica (semitic philology) filosofía (philosophy) historia (history) historia de América (American history) pedagogía (pedagogy) Medicina (Faculty of medicine) - Veterinaria (Faculty of veterinary medicine)	Law Medical science Humanities Education Medical science Agriculture

Teachers	Place of Training	Length of Study (in years)	Other Information
Before 1970 Reform			
1. Escuelas maternales, escuelas de párvulos (Nursery and pre-primary schools)	Escuela superior de magisterio (Primary teacher training schools)	Before 1965: 3 years. From 1965-1970: 2 years.	Prior to 1965 student-teachers were recruited after the general elementary or technical leaving certificate. The course lasted 3 years, at the end of which a primary school teacher's certificate was awarded to successful examination candidates. In order to become certificated, primary teachers were required to sit a competitive recruitment examination organised annually by each province. A law drawn up in 1965 and altered in 1967 states that candidates should hold a 2nd cycle secondary leaving certificate. Courses last 2 years, ending with a proficiency examination. Successful students attend an 8-month practical pedagogical training course. This course is organised under the supervision of the primary teacher training college staff and inspectors of primary education. Students receive payment during this period of training. The title of "master" is conferred only after completion of the training period. The most gifted pupils at once become part of the body of "national schoolmasters". The others must sit a recruitment examination. Holders of the former certificate can enter the pedagogy section in the arts faculty directly and are required to attend the pre-university course before entering other faculties. Holders of the new certificate are eligible for admission to the various centres of higher education and do not require to attend the pre-university course.
2. Escuelas primarias (Primary schools)	"	"	Primary teacher training schools also offer specialization courses enabling candidates to teach in:
3. Escuelas especiales (Special Schools)	"	"	(a) 7th and 8th year of primary schools; (b) special schools (for the physically and mentally handicapped); (c) in nursery and pre-primary schools; (d) can become principals of national multi-class schools (minimum of 8).
4. Centros de enseñanza media (Classical and modern secondary schools)			
- general subjects	Escuela de formación del profesorado (Teacher training colleges)	2	All teachers in official schools are required to be graduates (licenciados) in philosophy and arts subjects or in science, whether they work in State or other centres. Pedagogical training of teachers is divided into two parts and is organised by the teacher training college (escuela de formación del profesorado), the various sections of which are affiliated to universities. The 1st part is concurrent with the penultimate year of the degree course and consists of an introduction to general pedagogy and didactics. The 2nd part gives students practical training in the form of organised training periods in secondary schools. On completion of the period of pedagogical training, students considered "fit" receive a proficiency certificate in teaching (certificado de aptitud pedagógica, CAP) enabling them to take an examination in order to become certificated. Candidates without the CAP can take this examination only after a minimum of 2 years teaching in a secondary school.

Teachers	Place of Training	Length of Study (in years)	Other Information
			Several categories of teachers may be distinguished:
			- certificated teachers (catedráticos numerarios) recruited through a competitive examination from among graduates holding a CAP or who have practical experience.
			- assistant teachers (adjuntos numerarios) recruited by the centres, and not requiring to take the competitive examination, but they should satisfy age, nationality and physical fitness requirements as well as hold the certificates required by candidates taking the certificate examination.
			- assistants (ayudantes) appointed for a specific length of time by the directors of the national institutes of secondary education. They have no direct teaching responsibilities.
			Teachers in non-national schools can be either certificated, in which case they should hold a degree in philosophy and arts subjects or in science, or certificated supply teachers, in which case they should have a degree in any subject whatsoever or another equivalent diploma, or be auxiliaries recruited on the same terms as certificated supply teachers or from among candidates holding an auxiliary's diploma which does not necessitate the continuation of higher studies.
- Drawing	Escuelas de Bellas Artes (Fine Art schools)		Certificated art teachers are required to have completed the Fine Art course and have attended a pedagogical training course. Assistant teachers may complete only the general course.
- Physical education	Escuelas de educación física (Schools of physical education)		Physical education teachers are required to have completed the course of these schools.
- Religion			Teachers of religious instruction are classified, according to their functions, as certificate teachers and assistant teachers.
5. Centros de enseñanza laboral (Technical secondary education)			
- General subjects	Escuela de formación del profesorado (Teacher training colleges)	2	Teachers of general subjects are recruited according to the same regulations for teachers in general secondary schools.
- special subjects: drawing, physical education, religion			
- Technical subjects	Institución de formación del profesorado del enseñanza laboral (Technical teacher training colleges)	1	These teachers are recruited through a competitive examination from among holders of a "perito" diploma in engineering, architecture or other subjects. Candidates are required to have attended the pedagogic training course in technical teacher training colleges. Workshop supervisors are recruited from among holders of an advanced industrial qualification. After 5 years of practical teaching experience, teachers are required to sit a further competitive examination in order to confirm their appointment.

Teachers	Place of Training	Length of Study (in years)	Other Information
6. Centros de aprendizaje industrial (Industrial apprenticeship centres)	Institución de formación del profesorado del enseñanza laboral (Technical teacher training college)	1	Pedagogical training of vocational teachers also takes place in the technical teacher training institute. Teachers are recruited through a competitive examination from among holders of a foreman's industrial certificate who have attended specialization courses. Teachers are recruited from among holders of the "perito" certificate (technician-engineer). Candidates in competitive recruitment examination are required to hold a university title.
- Iniciación profesional (Introductory vocational courses)			
- Aprendizaje (Apprenticeship)			
- Maestría industrial (Foreman's industrial certificate)			
7. Enseñanza de comercio (Commercial schools)	-		Teachers are recruited through an examination (oposición) from among holders of the "profesorado mercantil" certificate which is awarded at the end of the course in the "escuelas profesionales de comercio". There is no specifically pedagogic training. After 5 years of practical experience, teachers are required to take a competitive examination in order to confirm their appointment. Teaching staff is recruited among holders of a higher technical school or university diploma. No pedagogic training is provided.
8. Escuelas técnicas de grado medio (Intermediate technical schools)	-		
9. Universidades	Universities		<u>Senior staff:</u> - Catedráticos numerarios (titular professors occupying a professorial chair) are recruited either on curriculum vitae from among holders of another professorial chair or through a competitive examination open to holders of a doctorate with 2 years experience in teaching or research in a State establishment. They are appointed for life and have the same status as civil servants. They are responsible for the teaching of subjects of which they hold the chair. <u>Middle-level staff:</u> - Encargados de cátedra vacante (interim professor) occupying a vacant chair until a permanent professor is appointed. They have the same qualifications and fulfill the same functions as titular professors. - Profesores agregados (associate professors) who are recruited on the same terms as titular professors but who are generally in charge of one department. They are required to exercise their functions on a full-time basis whereas this is not required of titular professors. They also have the same status as civil servants.

Teachers	Place of Training	Length of Study (in years)	Other Information
10. Escuelas técnicas superiores (Higher technical schools)			- Profesores adjuntos (assistant professors) who are recruited through a competitive examination from among holders of a doctorate. They are appointed for a period of 4 years with the possibility of renewing their appointment for the same period. They teach full-time. They can occupy a vacant chair but are more often responsible for the conducting of tutorials. - Junior-level staff: - Encargados de curso (lecturers) appointed for 1 year by the Minister of Education and Science on proposal of the dean and after consultation with the faculty board. The majority hold a doctorate but some lecturers hold only a 1st degree. They teach secondary subjects. - Ayudantes (assistant lecturers) are recruited among degree-holders for 1 year on the dean's proposal after consultation with the relevant professor. They assist the professors and lecturers in practical classes, laboratory, clinical and group study work. They are in close contact with the students. Members of the academic staff of outstanding ability in their field may be decreed extraordinary professors. The teaching staff of these institutions is subject to the same recruitment requirements and includes the same categories as the universities.
After the 1970 Reform		2/3	The 2nd cycle secondary leaving certificate (bachillerato) is a prerequisite for admission to these schools. Training in the theory and practice of educational methods is provided under the supervision of the Institutes of the Sciences of Education and gives preparation for the "diplomado" examination (graduate). Students who have obtained good results throughout their studies immediately become part of the teaching staff. The others require to prove their ability through further examinations. Holders of the "diplomado universitario" (university degree) who have attended the corresponding courses in the Institutes of the Sciences of Education also have access to the teaching profession.
11. Centros de bachillerato (2nd cycle-secondary education)		5 + pedagogic training	Teachers intending to enter the 2nd cycle of secondary education should hold a degree or an engineer's or architect's diploma. Pedagogic training is provided in the form of intensive courses held in the Institutes of the Sciences of Education. Students who have attended specialist classes in pedagogy during their university studies are exempted from these courses. Certificated teachers are recruited, in part, from among assistant teachers of same level on their curriculum vitae and, in part, from among university graduates who have completed the necessary pedagogical training and who are selected through their curriculum vitae and competitive examination.
- General subjects	Universidades and Institutos de Ciencias de la Educación		

Teachers	Place of Training	Length of Study (in years)	Other Information
- Technical and vocational activities and education			Assistant teachers are recruited from among university graduates who have completed the corresponding course in pedagogy. Recruitment is done by competitive examination and consultation of their curriculum vitae.
III. Centros de formación profesional de segundo grado (1st cycle vocational training centres)	Centros de formación profesional de segundo grado (2nd cycle vocational training centres)	2 + pedagogic training	Courses are given by vocational teachers or teachers specialized in the subjects included in curriculum or by staff specially recruited for the purpose. Candidates are required to have completed the 2nd cycle of vocational training and have attended a pedagogic course organised by the Institute of the Sciences of Education. Intending teachers are recruited through a competitive examination and consultation of their curriculum vitae or by a special contract.
IV. Centros de formación profesional de segundo grado (2nd cycle vocational training centres)	Universidades and Institutos de Ciencias de la Educación	3 + pedagogic training	Candidates are required to hold a university degree (diplomado); pedagogic training and recruitment requirements are same as for teachers of 1st cycle of vocational training.
V. Centros de formación profesional de tercer grado (3rd cycle vocational training centres)	"	5 + pedagogic training	Candidates require to be university graduates or hold an engineer's or architect's diploma and a specialist certificate. Pedagogic training and recruitment requirements are same as for teachers in university colleges (escuelas universitarias).
VI. Escuelas universitarias (University schools)	"	5 + pedagogic training	Candidates require to hold a university degree or an engineer's or architect's diploma and have attended the intensive training course in pedagogy held in the Institutes of the Sciences of Education. Those students who have studied pedagogy as a special subject during their university course are exempted from these courses. Recruitment of titular professors (catedráticos) is done through competitive examination and consultation of their curriculum vitae. Graduates of a university college with the required pedagogic training may also apply.
VII. Facultad y escuela técnica superior (Technical faculty and higher technical school)	"	7	In addition to required university qualifications, candidates should have pedagogic training acquired either during their studies for a doctorate or during their teaching experience. <u>Senior-level staff:</u> - Catedráticos numerarios (titular professors occupying a chair) are recruited, in part, through a competitive examination and consultation of their curriculum vitae among holders of the doctoral degree with the required pedagogic training and, in part, through a choice made from among the university professors with grade directly below. The choice is based on research work and teaching ability and experience. Certain persons of outstanding academic ability can be appointed emeritus professor.

Teachers	Place of Training	Length of Study (in years)	Other Information
			<u>Middle-level staff:</u> - Profesores agregados (associate professors): 25 per cent of them are recruited through a competitive examination and consultation of curriculum vitae from among the assistant professors (adjuntos) satisfying the necessary requirements. Certificated secondary 2nd cycle teachers (bachillerato) may, with certain reservations, submit their application for the appointment. The remaining 75 per cent are recruited from among holders of the doctoral degree with the necessary pedagogic training. Recruitment is based on competitive examinations and consultation of curriculum vitae. - Profesores adjuntos (assistant professors) are recruited from among holders of a doctorate who have at least 1 year's experience as an assistant (ayudante) or who have done research work with the Higher Scientific Research Council. Visiting professors and assistant professors are appointed to carry out specific tasks in a particular department. <u>Junior-level staff:</u> - Profesores ayudantes (assistant lecturers) recruited through competitive examination and consultation of curriculum vitae from among holders of degrees or an architect's or engineer's diploma. Candidates who, in order to take up their present occupation have had to show their ability in their field, may be exempted from the examination. Assistants are appointed for a period of 1 year with the possibility of renewal for a maximum of four successive periods. - Extraordinary professors: Persons of outstanding academic ability in their specific field of study may be appointed for a limited period of time. They enjoy the same academic treatment as the different categories of staff. They can be appointed for an unlimited period of time if their services prove permanently necessary, but they never receive the status of a civil servant.

BIBLIOGRAPHY

- Estadísticas de la enseñanza primaria - Instituto nacional de estadística.
- Estadística de la enseñanza media -
- I. Bachillerato y escuelas del magisterio.
 - II. Otras enseñanzas medias y enseñanza eclesiástica.
- Estadística de la enseñanza superior - Instituto nacional de estadística.
- La educación preescolar en España - Ministerio de educación y ciencia, 1966.
- | | | | |
|--------------------------------------|---|---|-------|
| Nuestro sistema escolar primario - " | " | " | 1966. |
| La enseñanza media en España - " | " | " | 1966. |
| Formación de maestros - " | " | " | 1966. |
- Así está la enseñanza primaria - Hablan los maestros - Jose Antonio-Aguirre Elustondo, 1969.
- La educación en España - Bases para una política educativa - Ministerio de educación y ciencia, 1969.
- Proyecto de Ley general de educación y de financiamiento de la reforma educativa, Madrid, 1969.
- Training and Functions of Technicians - Spain, OECD, 1968 (Document).
- Quantitative trends in teaching staff in higher education, OECD, 1971.
- Etude sur les enseignants, Espagne, OCDE, 1969 (Document).
- World Survey of Education, UNESCO, Vol. II, III, IV.
- School Systems: A Guide - Council for Cultural Co-operation, Council of Europe, Strasbourg, 1965 and 1970.
- Schools in Europe, Vol. III, Part A - edited by Walter Schultze - Verlag J. Beltz, 1968.

OECD SALES AGENTS DEPOSITAIRES DES PUBLICATIONS DE L'OCDE

ARGENTINE

Libreria de las Naciones
Alma 500, BUENOS AIRES

AUSTRALIA - AUSTRALIE

B.C.N. Agencies Pty. Ltd.
175 Collins Street, MELBOURNE 3000

AUSTRIA - AUTRICHE

Gerald and Co., Graben 31, WIEN 1.
Sub-Agent: GRAZ: Buchhandlung Jos. A. Kienreich, Sackstrasse 6

BELGIUM - BELGIQUE

Librairie des Sciences
Coudenberg 76-78 et rue des Eperonniers 36,
B 1000 BRUXELLES 1

BRAZIL - BRÉSIL

Mestre Joo S.A., Rua Gonçs 518,
Caixa Postal 24090, 05000 SAO PAULO 10.
Rua Senador Dantas 19 s 205-6, RIO DE JANEIRO GB

CANADA

Information Canada
OTTAWA

DENMARK - DANEMARK

Munksgaard Baghandel, Ltd., Nørregade 6
KØBENHAVN K

FINLAND - FINLANDE

Akateminen Kirjakauppa, Kesäkatu 2,
HELSINKI

FORMOSA - FORMOSE

Books and Scientific Supplies Services, Ltd.
P.O. B. 83, TAIPEI,
TAIWAN

FRANCE

Bureau des Publications de l'OCDE
2 rue André-Pascal, 75775 PARIS CEDEX 16
Principaux sous-dépôtaires:
PARIS: Presses Universitaires de France,
49 bd Saint-Michel, 75005 Paris.
Sciences Politiques (Lib.)
30 rue Saint-Guillaume, 75007 Paris.
11100 AIX-EN-PROVENCE: Librairie de l'Univer-
sité.
38000 GRENOBLE: Arthaud.
67000 STRASBOURG: Berger-Levrault.
31000 TOULOUSE: Privat.

GERMANY - ALLEMAGNE

Deutscher Bundes-Verlag G.m.b.H.
Postfach 1080, 53 BONN.
Sub-Agents: BERLIN 62: Ebert & Meuser.
HAMBURG: Reuter-Klinker; and in the
many branches Buchhandlungen Deutschlands.

GREECE - GRÈCE

Librairie-Kaufmann, 28 rue du Stade,
ATHÈNES 152.
Librairie Internationale Jean Michalopoulos et Fils
75 rue Hermou, B.P. 73, THÉSSALONIKI

IRELAND - IRLANDE

Smithers Johnson and Co., h.f., Heuston Road 9,
P.O. B. 1131, REYKJAVIK

INDIA - INDIE

Oxford Book and Stationery Co.:
NEW DELHI, Scindia House,
CALCUTTA, 17 Park Street.

IRELAND - IRLANDE

Evans and Son, 40-Lower O'Connell Street,
P.O. B. 42, DUBLIN 1

ISRAEL

Emmanuel Brown:
9 Shlomzion Bimalka Street, JERUSALEM
35 Allenby Road, and 46 Natiach Benjamin St.,
TEL-AVIV

ITALY - ITALIE

Libreria Comunitaria Sansoni:
Via Lamarmora 45, 50121 FIRENZE.
Via Rancaglia 14, 20146 MILANO
Sous-dépôtaires:
Editrice e Libreria Herber,
Piazza Montecitorio 120, 00186 ROMA.
Libreria Rizzoli, Largo Chiù 15, 00187 ROMA.
Libreria Hoepli, Via Hoepli 5, 20121 MILANO.
Libreria Lattes, Via Garibaldi 3, 10122 TORINO.
La diffusion des éditions OCDE est assurée par
les meilleures librairies de la ville la plus importante

JAPAN - JAPON

Maruzen Company Ltd.,
6 Tori-Nichome Nishinbashi, TOKYO 103,
P.O. B. 5050, Tokyo International 100-31

LIBANON - LIBAN

Redica
Immeuble Edison, Rue Bliss, B.P. 5641
BEYROUTH

THE NETHERLANDS - PAYS-BAS

W.P. Van Stockum
Buitenhof 36, DEN HAAG

NEW ZEALAND - NOUVELLE-ZÉLANDE

Government Printing Office,
Mulgrave Street (Private Bag), WELLINGTON
and Government Bookshops at
AUCKLAND (P.O. B. 5344)
CHRISTCHURCH (P.O. B. 1721)
HAMILTON (P.O. B. 857)
DUNEDIN (P.O. B. 1104)

NORWAY - NORVEGE

Johan Grundt Tanums Bokhandel,
Karl Johansgate 41-43, OSLO 1

PAKISTAN

Mirza Book Agency, 65 Shahrat Quaid-E-Azam,
LAHORE 1

PORTUGAL

Livros Portugal, Rua do Carmo 70, LISBOA

SPAIN - ESPAGNE

Mundi Prensa, Cuadellá 37, MADRID 1.
Libreria Basinos de José Bosch, Pelayo 52,
BARCELONA 1

SWEDEN - SUÈDE

Fretz, Kungl. Hushandels,
Förbättnings 2, 11152 STOCKHOLM 16

SWITZERLAND - SUISSE

Librairie Payot, 6 rue Grenus, 1211 GENEVE 11
et à LAUSANNE, NEUCHÂTEL, VEVEY,
MONTREUX, BERNÉ, BALE, ZÜRICH

TURKEY - TURQUIE

Librairie Hachette, 469 İnkilâf Caddesi, Beyoğlu,
İSTANBUL et 12 Ziya Gökalp Caddesi, ANKARA

UNITED KINGDOM - ROYAUME-UNI

H.M. Stationery Office, P.O. B. 508, LONDON
S.E.1 9NH
Branches at: EDINBURGH, BIRMINGHAM,
BRISTOL, MANCHESTER, CARDIFF,
BELFAST

UNITED STATES OF AMERICA

OECD Publications Center, Suite 1207,
1700 Pennsylvania Ave., N.W.
WASHINGTON, D.C. 20006. Tel.: (202)296-4755

VENEZUELA

Libreria del Exm. Avda. F. Miranda 52,
Edificio Gallego, CARACAS

YUGOSLAVIA - YOUGOSLAVIE

Jugoslavenska Knjiga, Terazije 27, P.O. B. 36,
BEOGRAD

Les commandes provenant de pays où l'OCDE n'a pas encore désigné de dépositaire
peuvent être adressées à :

OCDE, Bureau des Publications, 2 rue André-Pascal, 75775 Paris CEDEX 16

Orders and inquiries from countries where sales agents have not yet been appointed may be sent to
OECD, Publications Office, 2 rue André-Pascal, 75775 Paris CEDEX 16